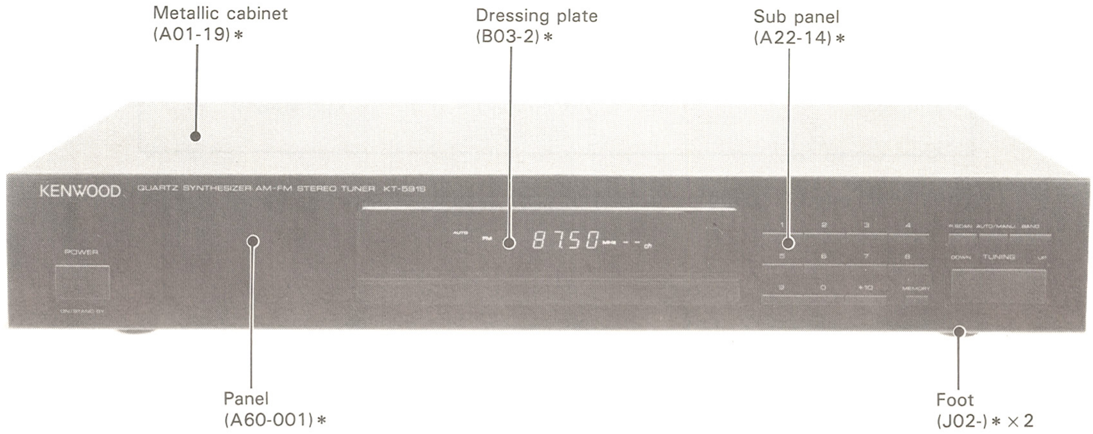
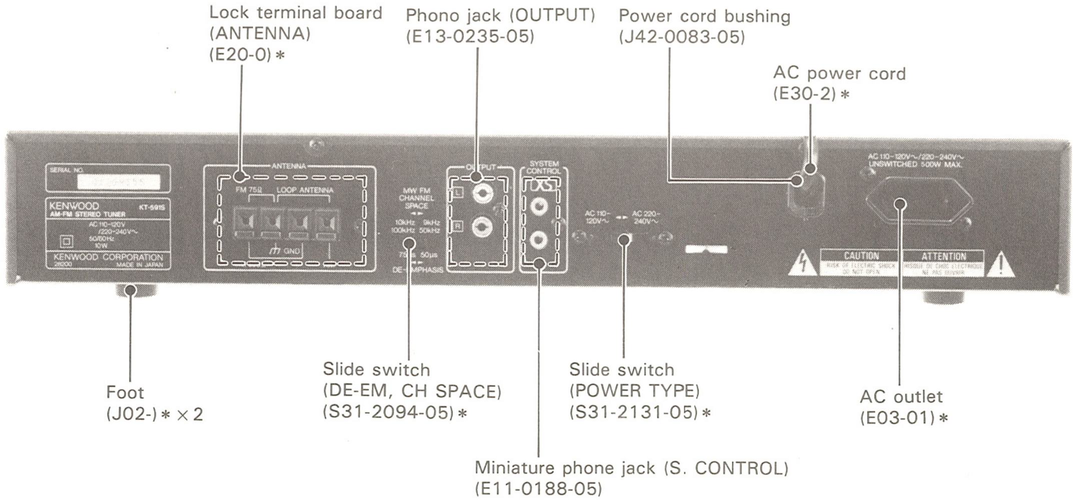
FM/AM STEREO SYNTHESIZER TUNER

KT-591/591S/1030L
SERVICE MANUAL

KENWOOD

©1991-1 PRINTED IN JAPAN
B51-4284-00(T) 3753


Metallic cabinet
(A01-19)*
Dressing plate
(B03-2)*
Sub panel
(A22-14)*
KENWOOD
QUARTZ SYNTHESIZER AM-FM STEREO TUNER KT-591S
POWER
Panel
(A60-001)*
Foot
(J02-)* ×2


Lock terminal board
(ANTENNA)
(E20-0)*
Phono jack (OUTPUT)
(E13-0235-05)
Power cord bushing
(J42-0083-05)
AC power cord
(E30-2)*
Foot
(J02-)* ×2
Slide switch
(DE-EM, CH SPACE)
(S31-2094-05)*
Slide switch
(POWER TYPE)
(S31-2131-05)*
AC outlet
(E03-01)*
Miniature phone jack (S. CONTROL)
(E11-0188-05)

KT-591 : K, P, Y, X type
KT-591S : M type
KT-1030L: T, E type

*** Refer to Parts List on page 34.**
Photo is KT-591S.

CONTENTS

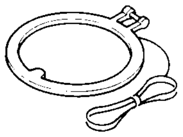
ACCESSORIES 2
BLOCK DIAGRAM 3
CIRCUIT DESCRIPTION 4
ADJUSTMENT 9
WIRING DIAGRAM 10
PC BOARD
(KT-591/1030L: COMPONENT SIDE VIEW) 11
PC BOARD (KT-591S: COMPONENT SIDE VIEW) 13
SCHEMATIC DIAGRAM (KT-591) 15
SCHEMATIC DIAGRAM (KT-591S) 21
SCHEMATIC DIAGRAM (KT-1030L) 27
EXPLODED VIEW 33
PARTS LIST 34
SPECIFICATIONS .... Back cover

	JAPAN MADE	SINGAPORE MADE	FRANCE MADE
KT-591	X05-4040-10 (K,P) X05-4042-91 (Y) X05-4040-71 (X)	X05-4050-10 (K)	————
KT-591S	X05-4060-20 (M)	————	————
KT-1030L	————	X05-4050-51 (T) X05-4052-71 (E)	X05-4042-71 (E)

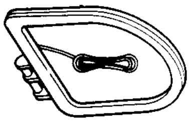
The KT-591 and KT-1030L are made in different countries. However, their circuits are identical.

ACCESSORIES

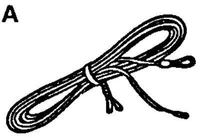
LOOP ANTENNA
(T90-0153-05): FRANCE MADE



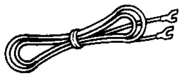
LOOP ANTTENA
(T90-0173-05): JAPAN MADE
(T90-0174-05): SINGAPORE MADE



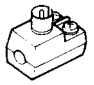
LEAD WIRE ANTENNA
KT-591/591S only
(T90-0182-05)



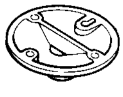
T TYPE ANTENNA
KT-1030L only
(T90-0176-05): FRANCE MADE
(T90-0175-05): SINGAPORE MADE



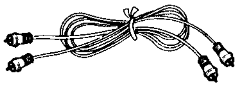
ANTENNA ADAPTOR
(T90-0177-05): KT-1030L only



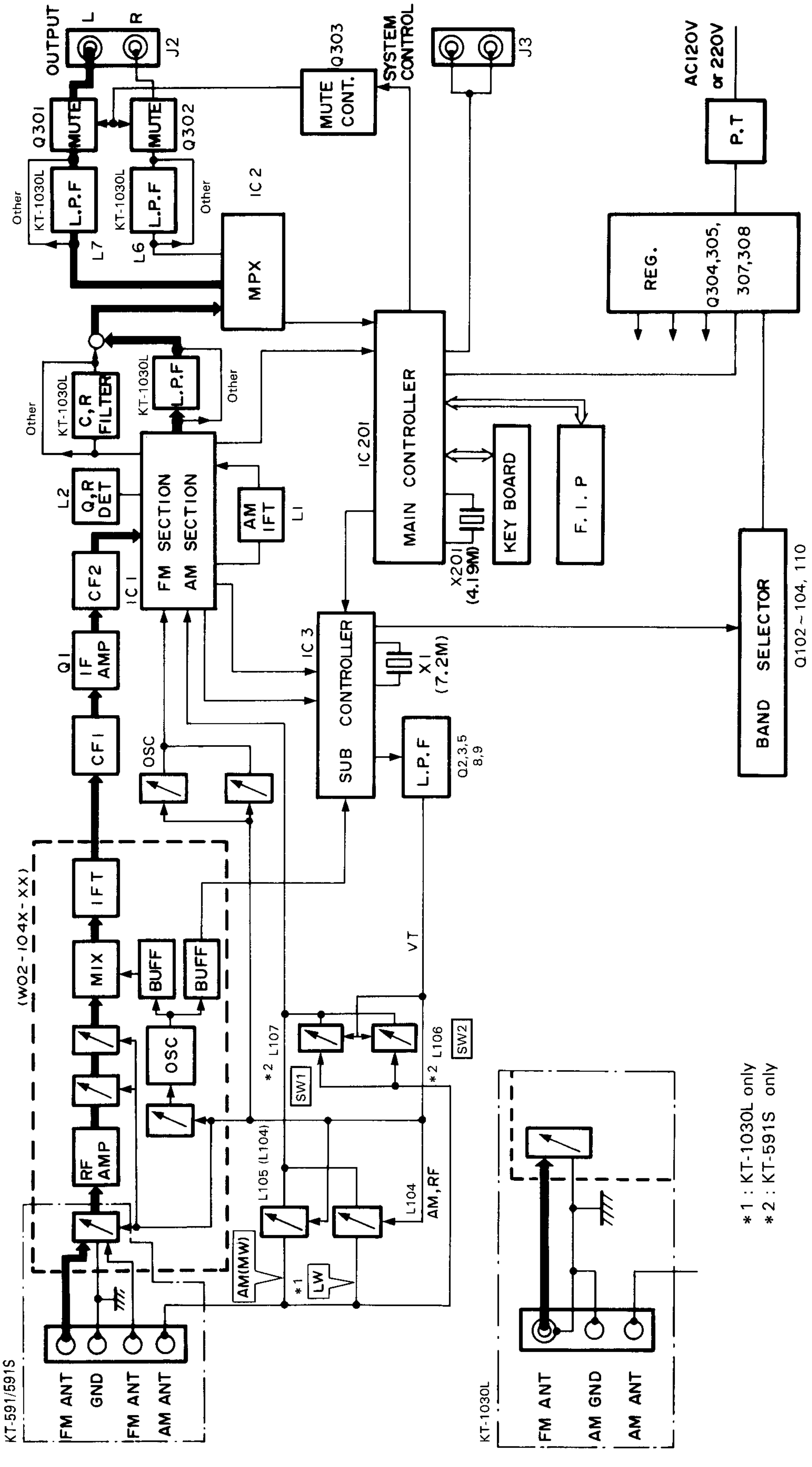
ANTENNA HOLDER
(J19-2815-04)



AUDIO CORD
(E30-0615-05): KT-591/591S
(E30-0505-05): KT-1030L



BLOCK DIAGRAM


OUTPUT
L
R
J2
J3
Q301
MUTE
Q302
MUTE
Q303
MUTE CONT.
SYSTEM CONTROL
AC120V or 220V
P.T
KT-1030L
Other
L.P.F
L7
L6
IC 2
MPX
REG.
Q304,305, 307,308
C,R FILTER
L.P.F
IC201
MAIN CONTROLLER
KEY BOARD
F. I. P
X201 (4.19M)
L2
Q,R DET
FM SECTION
AM SECTION
AM IFT
L1
IC 1
CF2
Q1
IF AMP
IC 3
SUB CONTROLLER
X1 (7.2M)
BAND SELECTOR
Q102～104, 110
CF1
OSC
L.P.F
Q2,3,5 8,9
(W02-104X-XX)
IFT
MIX
BUFF
BUFF
OSC
RF AMP
VT
*2 L107
SW1
*2 L106
SW2
L105 (L104)
L104
AM,RF
AM(MW)
*1
LW
KT-591/591S
FM ANT
GND
FM ANT
AM ANT
KT-1030L
FM ANT
AM GND
AM ANT
*1 : KT-1030L only
*2 : KT-591S only

CIRCUIT DESCRIPTION

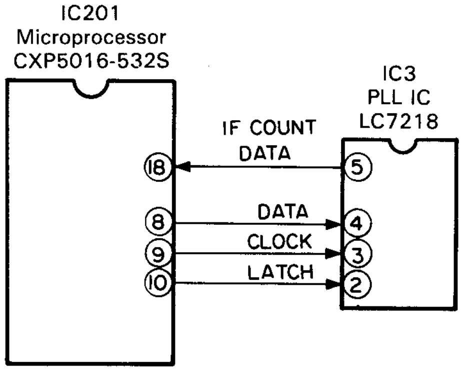
1. FEATURES

(1) Receiving bands

The unit is capable of receiving five bands; FM, AM (MW), LW, SW1 and SW2. The PLL IC is either LC7218 or LM7001 depending on whether SW (short wave) bands is to be received or not.

For details, refer to the table showing models according to the destinations (Table 1).

(2) IF count (when LC7218 is used)



When microcomputer pin SD goes low after the microcomputer has sent frequency data to the PLL, the IF count start data is sent to the PLL, which then starts counting the IF. When the microcomputer receives the IF count end signal from the PLL, the microcomputer reads IF count data from the PLL.

For MW/SW reception, the microcomputer identifies the receiving condition when the data becomes 450 kHz, sends the frequency data again to the PLL, and turns MUTING OFF in 0.5 second.

The TUNED indicator is lighted when the IF count result becomes OK.

IF counting is performed twice during auto tuning.

(3) Auto tuning

The auto tuning starts when the UP or DOWN key is pressed while the AUTO indicator is lighted.

MUTING is set to ON during tuning.

Frequencies are scanned upward or downward at a rate of about 125 ms/step (or 500 ms/step at band edges) until the tuned condition (✱), in which the scanning stops. (Pressing the UP key during upward tuning or pressing the DOWN key during downward tuning is invalid.)

MUTING is turned OFF in 0.5 second after the tuning has stopped.

(✱) Tuned condition

Condition in which there is a broadcasting station and it is being received.

With LM7001 (PLL), the TUNED indicator lights up and tuned condition starts when pin SD goes Low. With LC7218 (PLL), the tuned condition starts in the same way as with LM7001 for the FM band. For the MW/SW bands, the tuned condition starts following the process described in "(2) IF count" above.

(4) Manual tuning

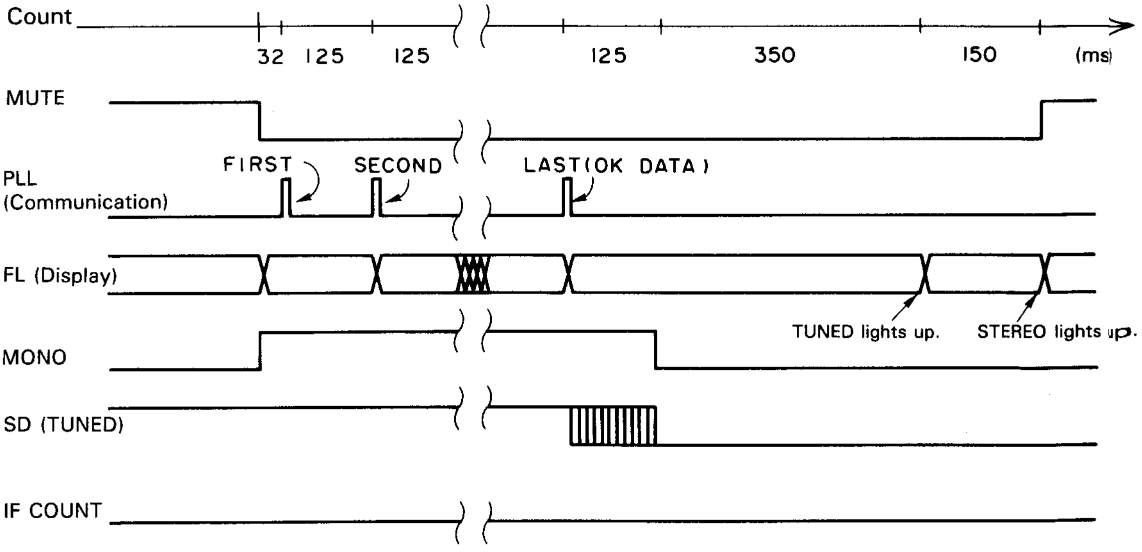
When the "AUTO" display is off, when the UP or DOWN key is pressed, the tuning operation goes in the direction of increasing or decreasing frequency at a rate of one step per key pressure.

When the UP or DOWN key is pressed continuously for more than 0.5 sec, the tuning operation continues in the direction of increasing or decreasing direction at a rate of 125 mses/step irrespective of the SD terminal level until the key is released from the finger pressure, after which 0.5 sec later, muting is turned OFF.

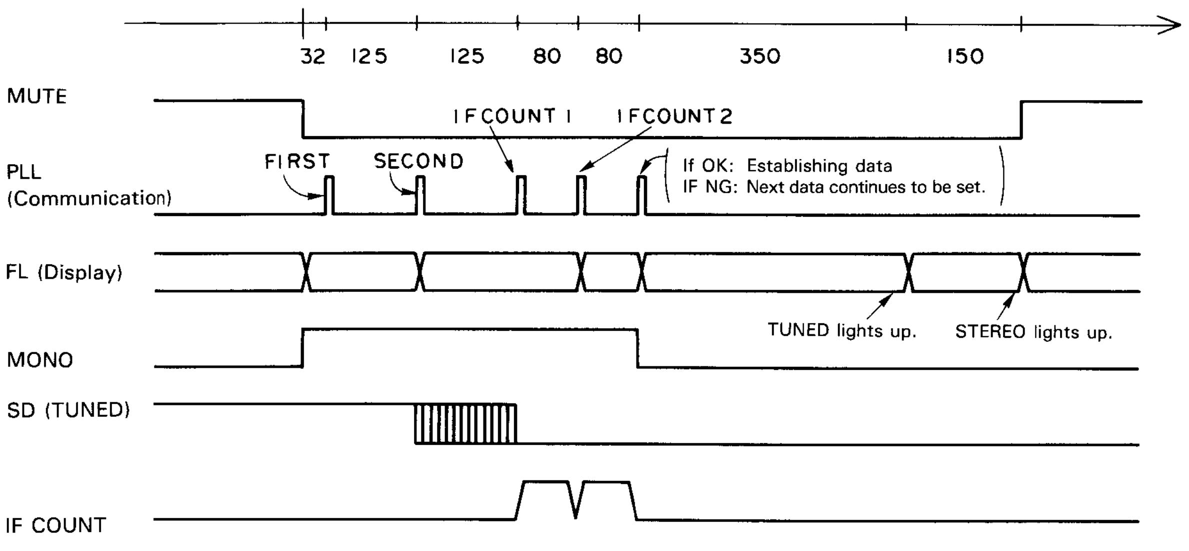
2. TIMING CHART

Auto tuning

(1) No IF Count



(2) With IF count



3. Conditions by destination

Destination Type		Destination switches				Band	Receiving frequency range	Inter-channel space (Hz)	IF	RF (Hz)	PLL (IC)	
		3	2	1	0							
K	K1	0	0	1	0	FM	87.5 ~ 108.0 MHz	100 k	+ 10.7 MHz	50 k	LM7001	AM Narrow
						AM	530 ~ 1610 kHz	10 k	+ 450 kHz	10 k		
	K2	0	0	0	0	FM	87.5 ~ 108.0 MHz	100 k	+ 10.7 MHz	50 k	LM7001	AM Wide
						AM	530 ~ 1700 kHz	10 k	+ 450 kHz	10 k		
	K3	1	0	1	0	FM	87.5 ~ 108.0 MHz	100 k	+ 10.7 MHz	50 k	LC7218	With SW
						MW	530 ~ 1610 kHz	10 k	+ 450 kHz	10 k		
						SW1	3.2 ~ 7.3 MHz	5 k	+ 450 kHz	5 k		
						SW2	9.5 ~ 21.85 MHz	5 k	+ 450 kHz	5 k		
E	E1	0	1	1	0	FM	87.5 ~ 108.0 MHz	50 k	+ 10.7 MHz	50 k	LM7001	
						AM	531 ~ 1603 kHz	9 k	+ 450 kHz	9 k		
	E2	0	1	1	1	FM	87.5 ~ 108.0 MHz	50 k	+ 10.7 MHz	50 k	LM7001	With LW
						MW	531 ~ 1603 kHz	9 k	+ 450 kHz	9 k		
						LW	153 ~ 281 kHz	1 k	+ 450 kHz	1 k		
	E3	1	1	1	0	FM	87.5 ~ 108.0 MHz	50 k	+ 10.7 MHz	50 k	LC7218	With SW
						MW	531 ~ 1603 kHz	9 k	+ 450 kHz	9 k		
						SW1	3.2 ~ 7.3 MHz	5 k	+ 450 kHz	5 k		
						SW2	9.5 ~ 21.85 MHz	5 k	+ 450 kHz	5 k		

(Table 1)

(*) BAND Selection (1: With diode/0: Without diode)
BAND 3 .... With SW/Without SW
BAND 2 .... STEP 9 k, 50 k/10 k, 100 k
BAND 1 .... AM Narrow/Wide
BAND 0 .... With LW/Without LW

4. Initial status setting (reset)

(1) Method of setting
While pressing the MEMORY key, turn AC ON.
(2) Contents
① POWER: OFF
② MUTE: ON
③ Forced MONO: OFF
④ FL display: All off
⑤ State: RAM state = All clear
Tuning mode = AUTO
Memory = Test frequency (Table 2)
Last band = FM
Last frerquency = Lowermost limit of each band.
Last P. CH = ⌈-- ch⌋

5. Test frequency

	KT-591		KT-1030L	KT-591S
P.ch	**FM 50 k/AM 9 k**	**FM 100 k/AM 10 k**	**With LW**	**With SW**
01ch	FM 98.0 MHz	FM 98.0 MHz	FM 98.0 MHz	FM 98.0 MHz
02ch	FM 108.0 MHz	FM 108.0 MHz	FM 108.0 MHz	FM 108.0 MHz
03ch	AM 630 kHz	AM 620 kHz	AM 620 kHz	AM 620 kHz
04ch	AM 990 kHz	AM 990 kHz	AM 990 kHz	AM 990 kHz
05ch	AM 1440 kHz	AM 1440 kHz	AM 1440 kHz	AM 1440 kHz
06ch	AM 1602 kHz	AM 1610 kHz	AM 1610 kHz	AM 1610 kHz
07ch	FM 87.5 MHz	AM 1700 kHz (FM 87.5 MHz)	LW 162 kHz	FM 87.5 MHz
08ch	FM 87.5 MHz	FM 87.5 MHz	LW 216 kHz	SW1 5.0 MHz
09ch	FM 87.5 MHz	FM 87.5 MHz	LW 270 KHz	SW2 15.0 MHz
10ch	FM 89.1 MHz	FM 89.1 MHz	FM 89.1 MHz	FM 89.1 MHz
11ch	FM 87.5 MHz	FM 87.5 MHz	LW 281 kHz	SW1 3.2 MHz
12ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW1 3.5 MHz
13ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW1 5.0 MHz
14ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW1 6.8 MHz
15ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW1 7.3 MHz
16ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW2 9.5 MHz
17ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW2 10.0 MHz
18ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW2 15.0 MHz
19ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW2 18.5 MHz
20ch	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	SW2 21.85 MHz

(Table 2)

6. Test mode

(1) Method of setting
While holding the DOWN key depressed, plug the AC power cord to the power outlet.

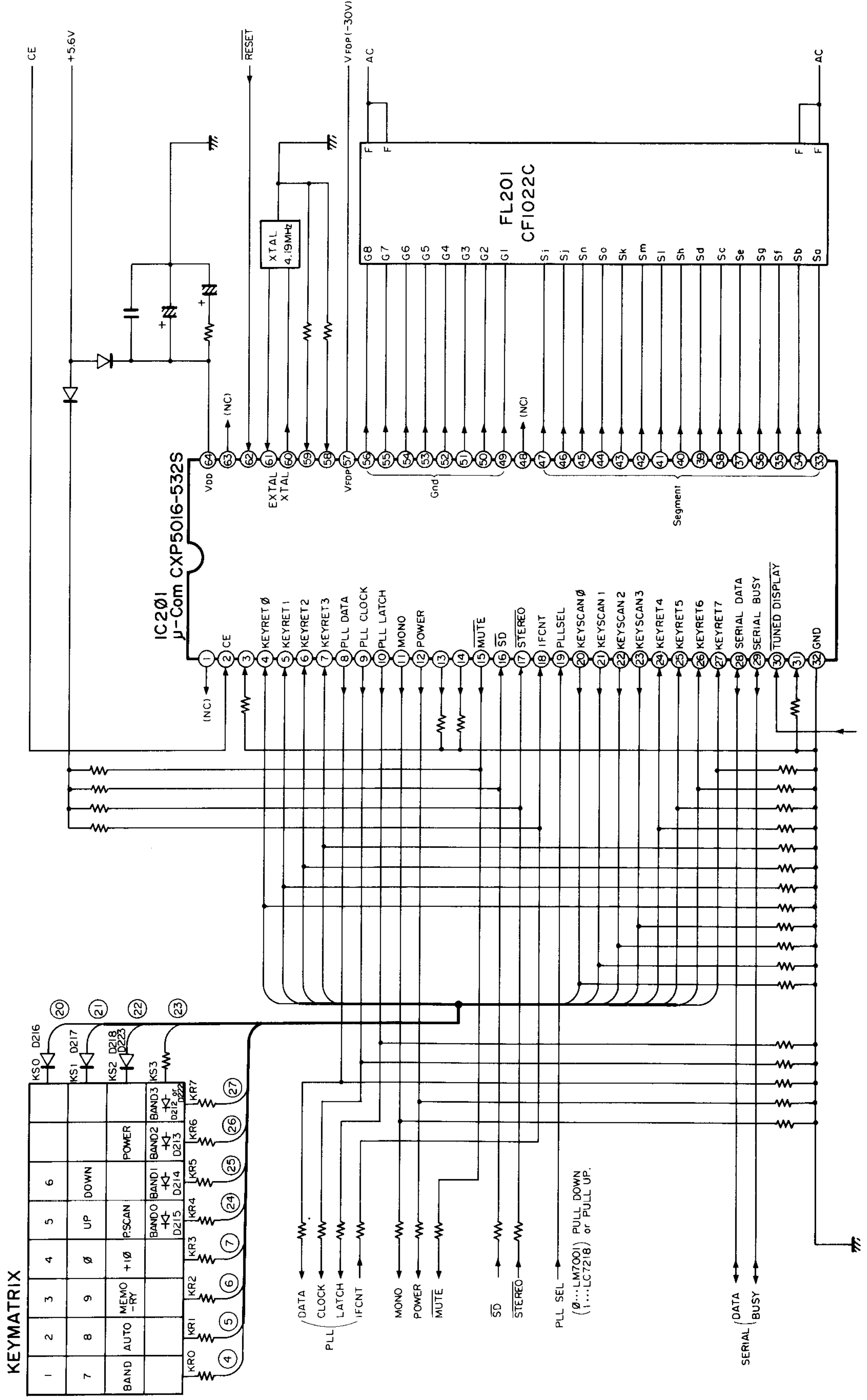
(2) Display of test mode
When the test mode is set, all FL tubes are lit up. The FL tubes are kept lit until there is a key entry which results in a change of the FL frequency display.

(3) Operations in test mode
The operations are basically the same as in normal operation modes. Only difference lies in the processing accompanying the + 10 key and 0 key (numeric keys).
Namely, the preset channel definition method using the + 10 key and numeric keys is different in the test mode. The preset channels are divided into three groups as shown below.
{01 ch - 10 ch/0 - ch/-- ch} : Group 1
{11 ch - 20 ch/1 - ch } : Group 2
{21 ch - 30 ch/2 - ch } : Group 3

When the current channel is in group 1, the 1 to 9 keys represent "01 ch" to "09 ch", and the 0 key represent "10 ch". Change from group 1 to another group does not occur until the + 10 key is pressed.
Pressing the + 10 key allows to change the group. When it is pressed while the current group is group 1, the display changes to "1- ch" and the current group is changed to group 2. Pressing the key while the current group is group 2 changes it to group 3 ("2- ch" display), and pressing the key while the current group is group 3 changes it to group 1 ("0- ch" display).

(4) Method of canceling
Unplug the AC power cord.

7. IC 201: CXP5016-532S MICROPROCESSOR

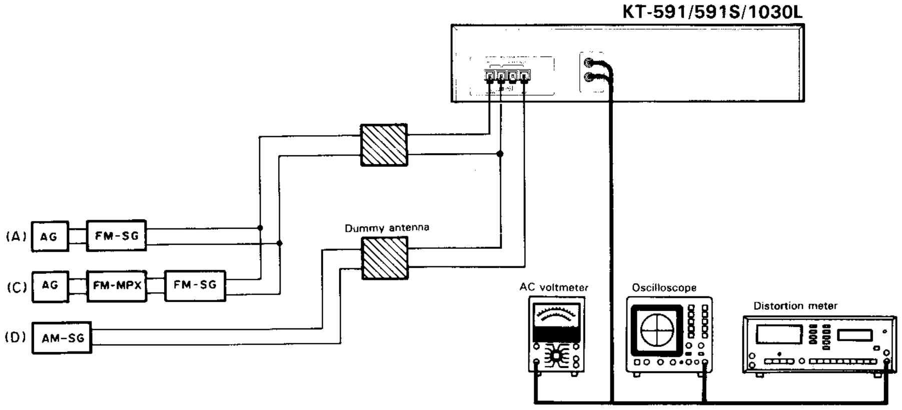

CE
+5.6V
RESET
VFDP(-30V)
AC
FL201
CF1022C
XTAL 4.19MHz
G8 G7 G6 G5 G4 G3 G2 G1
Si Sj Sn So Sk Sm Sl Sh Sd Sc Se Sg Sf Sb Sa
F F
(NC)
VDD
EXTAL
XTAL
VFDP
Gnd
Segment
IC201
μ-Com CXP5016-532S
CE
KEYRET0
KEYRET1
KEYRET2
KEYRET3
PLL DATA
PLL CLOCK
PLL LATCH
MONO
POWER
MUTE
SD
STEREO
IFCNT
PLLSEL
KEYSCAN0
KEYSCAN1
KEYSCAN2
KEYSCAN3
KEYRET4
KEYRET5
KEYRET6
KEYRET7
SERIAL DATA
SERIAL BUSY
TUNED DISPLAY
GND
KS0 D216
KS1 D217
KS2 D218 D223
KS3
KR0 KR1 KR2 KR3 KR4 KR5 KR6 KR7
BAND0 D215
BAND1 D214
BAND2 D213
BAND3 D212
KEYMATRIX
1 2 3 4 5 6
7 8 9 0
BAND AUTO MEMO-RY +10 P.SCAN UP DOWN POWER
PLL DATA CLOCK LATCH IFCNT
MONO POWER MUTE
SD STEREO
PLL SEL (0…LM7001) (1…LC7218) PULL DOWN or PULL UP.
SERIAL DATA BUSY

Pin functions

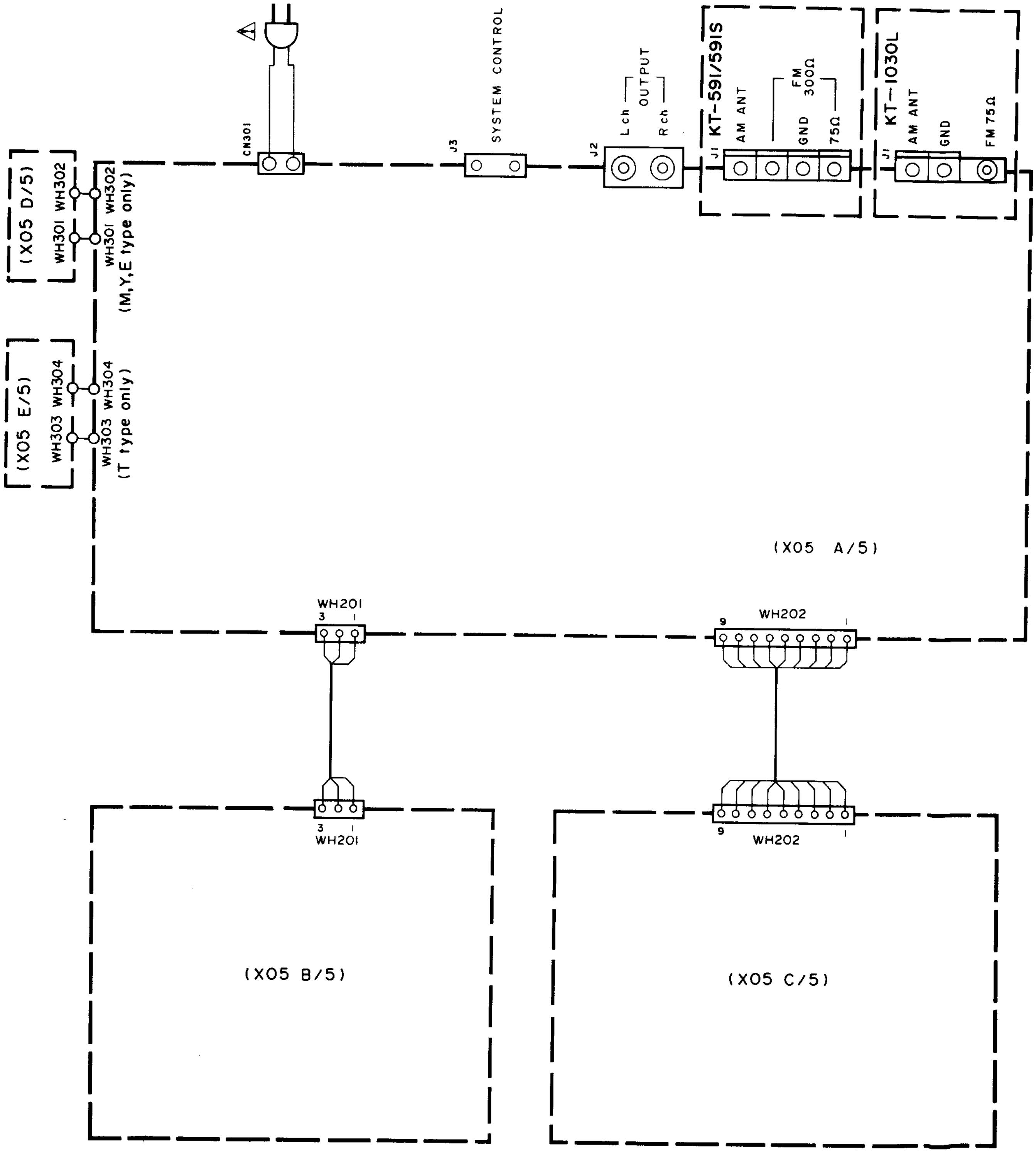
Pin No.	Pin name	I/O	Name	Operation description
1	PWM/PY1	O		No used
2	WP/PY2	I	$\overline{\text{CE}}$	Chip enable pin. Active low
3	RMC/EC/PY3	O		No use
4~7		I	KR0~KR3	Key return input. KR0~KR3
8	PD0	O	PLLDT	PLL DATA output
9	PD1	O	PLLCK	PLL CLOCK output
10	PD2	O	PLLCE	PLL CE output
11	PD3	O	PMONO	Forced MONO output H: ON L: OFF
12	PC0	O	PPOWER	Power ON/OFF control H: ON L: OFF
13,14		O		No used
15	PC3	O	$\overline{\text{PMUTE}}$	Line mute Active low
16	PEC	I	$\overline{\text{PSD}}$	SD pin Active low
17	PF1	I	$\overline{\text{PSTEREO}}$	Stereo signal input H: MONO L: STEREO
18	PF2	I	PIFCNT	IF COUNT pin. On when IF count is finised
19	PF3	I	PLLSEL	PLL select pin H: LC7218 L: LM7001
20~23	PE0~PE3	O	KS0~KS3	Key scan output KS0~KS3
24~27	PB0~PB3	I	KR4~KR7	Key return input KR4~KR7
28	PA0	I/O	SDATA	System control DATA
29	PA1	I/O	SBUSY	System control BUSY
30	PA2	I	$\overline{\text{PSDD DISP}}$	"TUNED" display pin. Active low
31	PA3	I		No used
32	Vss	—	GND	GND pin
33~48		O	Sa~Sn	FDP segment Sa~Sn
49~56		O	G1~G8	FDP grid G1~G8
57	VFDP	—	VFDP	−30 V
58,59		I		No used
60	XTAL	O		Quartz oscillator output.
61	EXTAL	I		Quartz oscillator input.
62	RST	I	$\overline{\text{RESET}}$	Forced reset pin. Active low
63	PYO	O		No used.
64	VDD	—	VDD	Power supply.

ADJUSTMENT

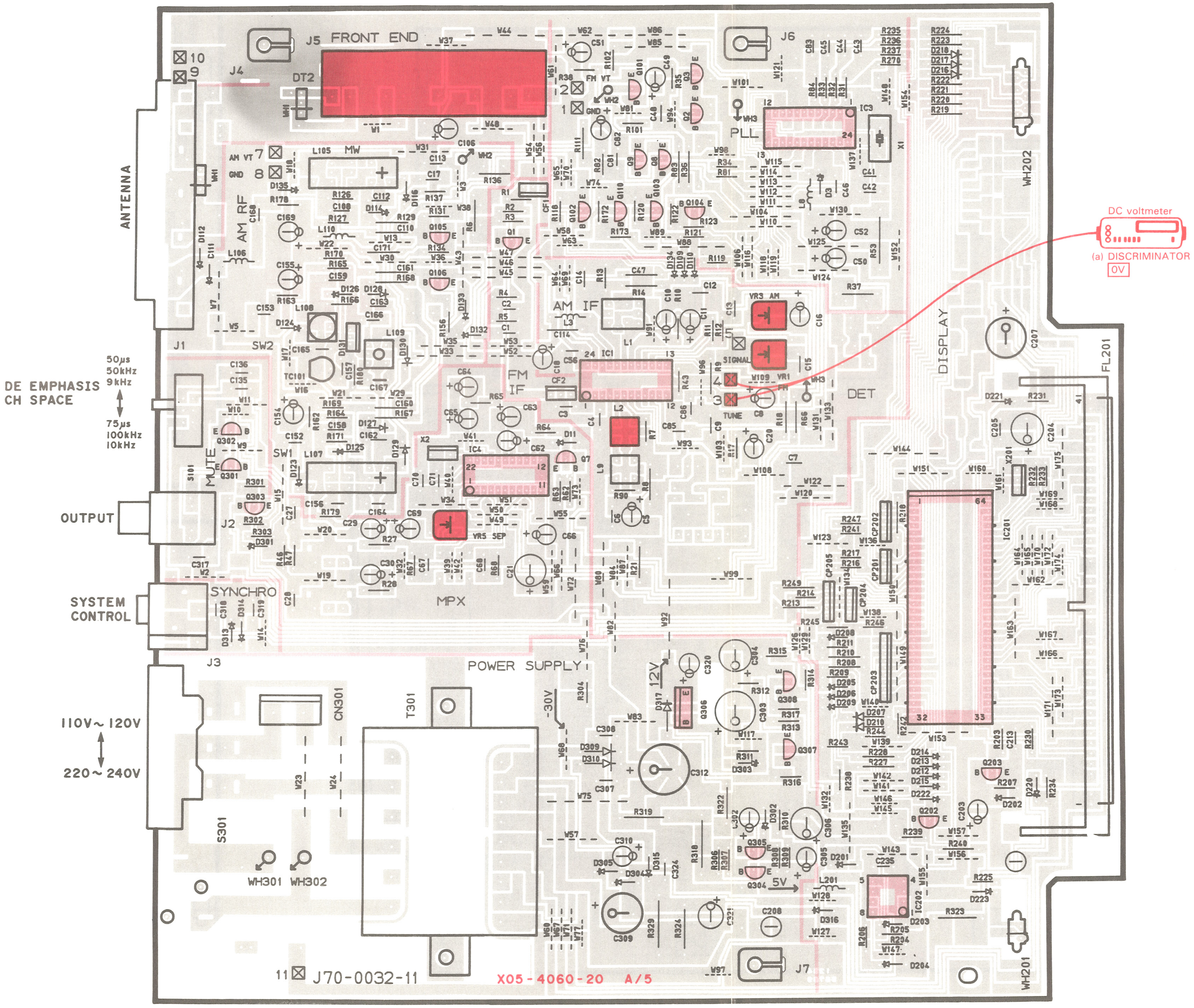
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION			SELECTOR: FM				
1	DISCRIMINATOR	(A) 98.0MHz 1kHz,±75kHz dev <KT-591/591S> 1kHz,±40kHz dev <KT-1030L> 60dBμ (ANT input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L2 (X05-)	0V	(a)
					L9 (X05-) <KT-1030L only>	Minimum distortion	
2	VCO <KT-591/1030L only>	(A) 98.0MHz 0 dev 60dBμ (ANT input)	Connect a frequency counter to TP5 and TP6 (GND). (X05-)	AUTO 98.0MHz	VR2 (X05-)	19.00kHz	(b)
3	DISTORTION (STEREO)	(C) 98.0MHz 1kHz,±68.25kHz dev Pilot:±7.5kHz dev <KT-591/591S> 1kHz,±40kHz dev Pilot:±6kHz dev <KT-1030L> 60dBμ (ANT input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion	
4	SEPARATION <KT-591S/1030L only>	(C) 98.0MHz 1kHz,±68.25kHz dev Pilot:±7.5kHz dev <KT-591S> 1kHz,±40kHz dev Pilot ±6kHz dev <KT-1030L> Selector:L or R 60dBμ (ANT input)	(B)	AUTO 98.0MHz	VR5 (X05-) <KT-591S>	Minimum crosstalk	
					VR4 (X05-) <KT-1030L>		
5	TUNING LEVEL	(A) 98.0MHz 1kHz,±75kHz dev <KT-591/591S> 1kHz,±45kHz dev <KT-1030L> 14dBμ(ANT input) 75Ω 18dBμ(ANT input)300Ω	(B)	AUTO or MONO 98.0MHz	VR1 (X05-)	Adjust VR1 and stop at the point where FL201(two dots) goes ON.	
AM(MW) SELECTION			SELECTOR:AM(MW)				
(1)	TUNING LEVEL	(D) 1008kHz 400Hz,30% mod 26dBμ(ANT input)	(B)	1008kHz	VR3 (X05-)	Adjust VR3 and stop at the point where FL201(two dots) goes on.	

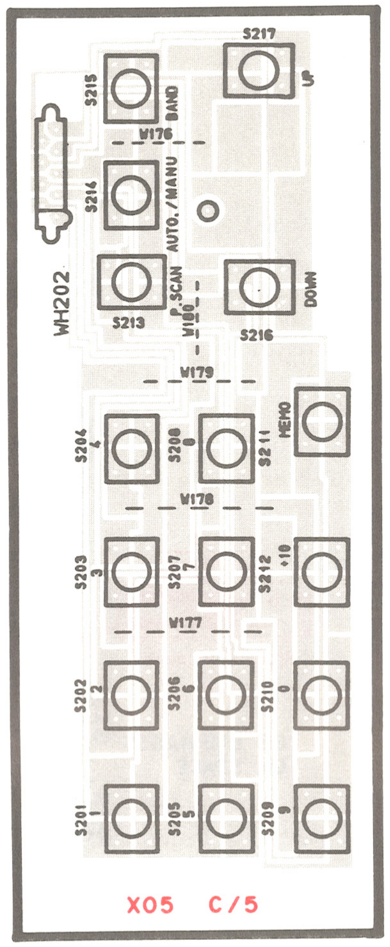


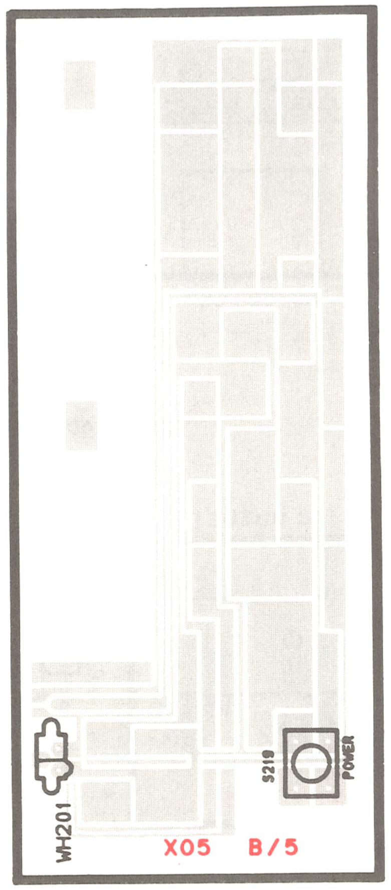
WIRING DIAGRAM


CN301
J3
SYSTEM CONTROL
J2
L ch
OUTPUT
R ch
J1
KT-591/591S
AM ANT
FM
300Ω
GND
75Ω
J1
KT-1030L
AM ANT
GND
FM 75Ω
(X05 D/5)
WH301 WH302
WH301 WH302
(M,Y,E type only)
(X05 E/5)
WH303 WH304
WH303 WH304
(T type only)
(X05 A/5)
WH201
3 1
WH202
9 1
3 1
WH201
9 1
WH202
(X05 B/5)
(X05 C/5)

PC BOARD (KT-591S: Component side view)

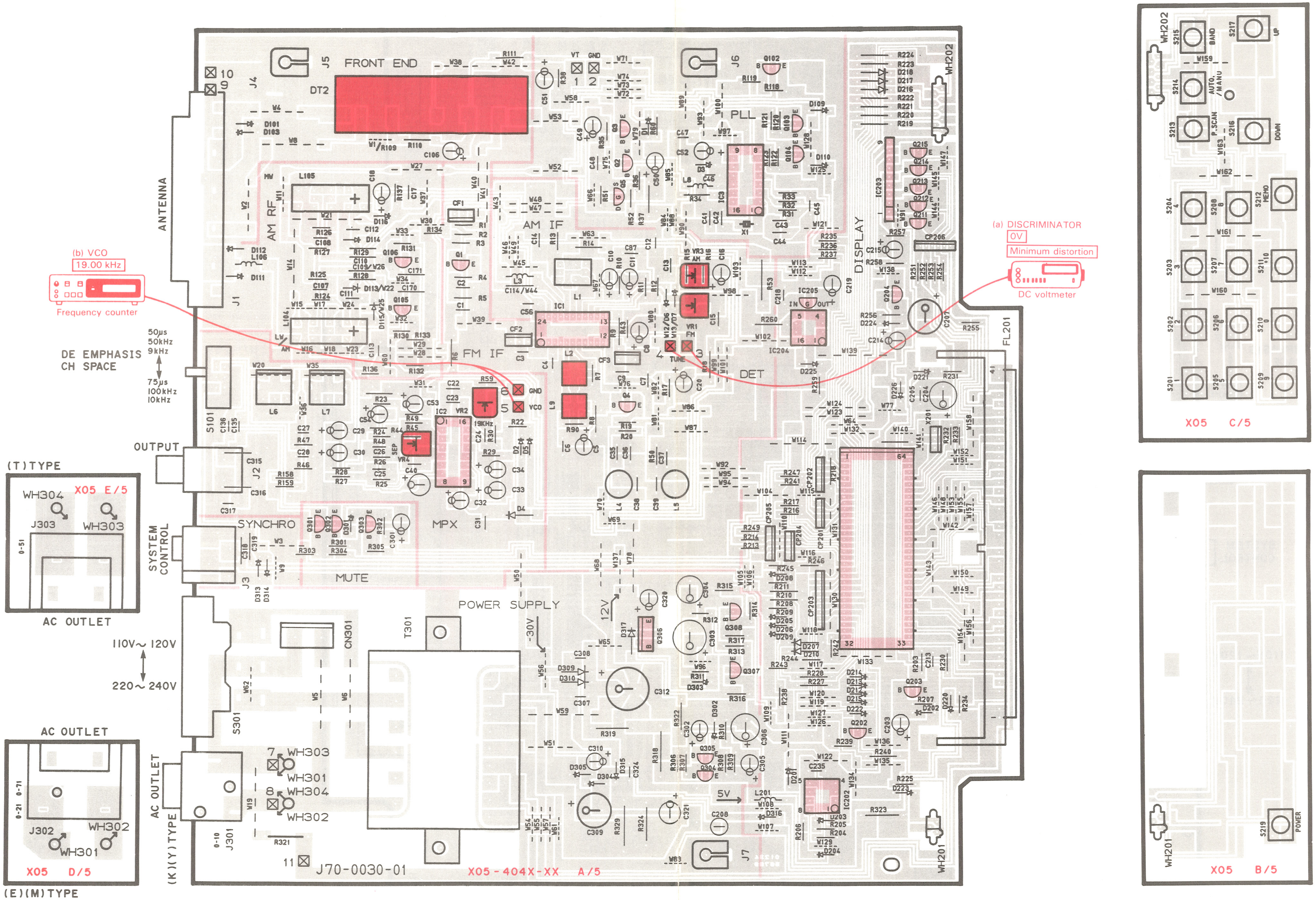

ANTENNA
DE EMPHASIS
CH SPACE
50μs 50kHz 9kHz
75μs 100kHz 10kHz
OUTPUT
SYSTEM CONTROL
110V～120V
220～240V
J5 FRONT END
J4
J6
PLL
J1
J2
J3
J7
SW1
SW2
MUTE
SYNCHRO
AM RF
MW
AM IF
FM IF
DET
MPX
DISPLAY
FL201
POWER SUPPLY
T301
CN301
S301
WH301 WH302
WH201
WH202
IC1
IC2
IC3
IC4
IC201
IC202
VR1
VR3 AM
VR5 SEP
SIGNAL
TUNE
12V
-30V
5V
DC voltmeter
(a) DISCRIMINATOR
0V
J70-0032-11
X05-4060-20 A/5


S217
S215 BAND
S214 AUTO./MANU
S213 P.SCAN
S216 DOWN
UP
WH202
S204 S208 S211 MEMO
S203 S207 S212 +10
S202 S206 S210
S201 S205 S209
X05 C/5

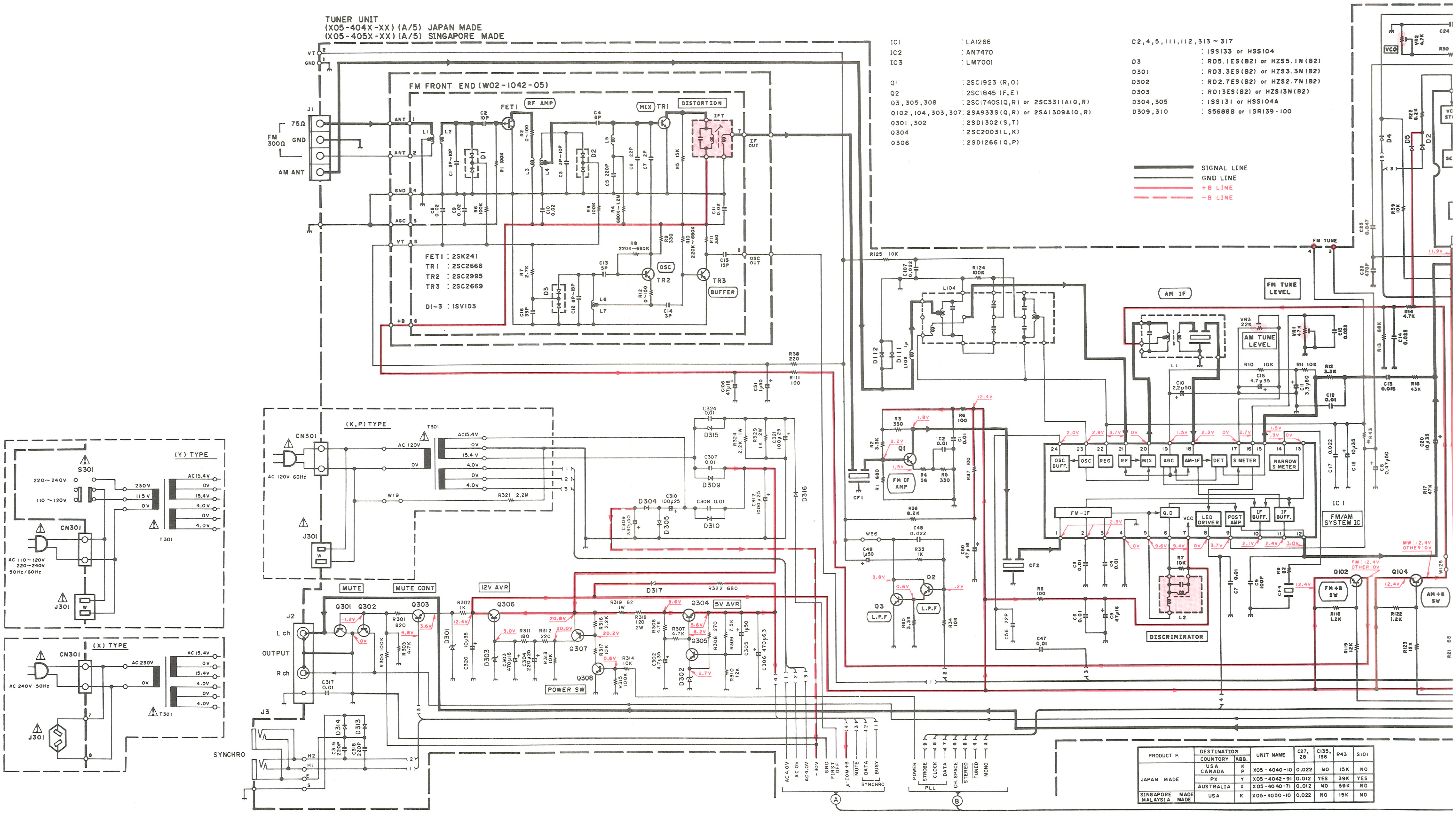

WH201
S218 POWER
X05 B/5

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (KT-591/1030L: Component side view)


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
7
FRONT END
DT2
ANTENNA
AM RF
AM IF
FM IF
PLL
DISPLAY
DET
MPX
SYNCHRO
MUTE
POWER SUPPLY
OUTPUT
SYSTEM CONTROL
AC OUTLET
(K)(Y)TYPE
J5
J6
J7
J4
J1
J2
J3
J301
IC1
IC2
IC3
IC202
IC203
IC204
IC205
T301
CN301
S101
S301
FL201
WH201
WH202
VCO
GND
TUNE
19KHz
12V
-30V
5V
(b) VCO
19.00 kHz
Frequency counter
(a) DISCRIMINATOR
0V
Minimum distortion
DC voltmeter
DE EMPHASIS
CH SPACE
50μs
50kHz
9kHz
75μs
100kHz
10kHz
(T)TYPE
X05 E/5
WH304
J303
WH303
AC OUTLET
110V~ 120V
220~ 240V
AC OUTLET
J302
WH302
WH301
X05 D/5
(E)(M)TYPE
7 WH303
WH301
8 WH304
WH302
J70-0030-01
X05-404X-XX A/5
BAND
UP
AUTO./MANU
P.SCAN
DOWN
MEMO
POWER
X05 C/5
X05 B/5

Refer to the schematic diagram for the values of resistors and capacitors.


A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
FM FRONT END (W02-1042-05)
RF AMP
MIX TR1
DISTORTION
IFT
IF OUT
OSC OUT
OSC
TR2
TR3
BUFFER
FET1 : 2SK241
TR1 : 2SC2668
TR2 : 2SC2995
TR3 : 2SC2669
D1~3 : 1SV103
J1
75Ω
FM 300Ω
GND
AM ANT
ANT
AGC
VT
+B
(K, P) TYPE
(Y) TYPE
(X) TYPE
CN301
T301
S301
J301
220~240V
110~120V
AC 120V 60Hz
AC 110~120V 220~240V 50Hz/60Hz
AC 240V 50Hz
AC15.4V
15.4V
4.0V
0V
230V
115V
W19
R321 2.2M
MUTE
MUTE CONT
Q301 Q302
Q303
12V AVR
Q306
Q307
Q308
POWER SW
Q304
5V AVR
Q305
J2
L ch
OUTPUT
R ch
J3
SYNCHRO
D301
D302
D303
D304
D305
D309
D310
D314
D313
D315
D316
D317
FM IF AMP
Q1
Q2
Q3
L.P.F
CF1
CF2
L104
D111
D112
AM IF
FM TUNE LEVEL
AM TUNE LEVEL
OSC BUFF.
OSC
REG
RF
MIX
AGC
AM-IF
DET
S METER
NARROW S METER
FM-IF
Q.D
LED DRIVER
POST AMP
IF BUFF.
IC1
FM/AM SYSTEM IC
DISCRIMINATOR
Q102
Q104
FM +B SW
AM +B SW
FM 12.4V OTHER 0V
MW 12.4V OTHER 0V
FM TUNE
VCO
AC 4.0V
AC 0V
AC 4.0V
-30V
GND
FIRST OFF
μ-COM +B
MUTE
DATA
BUSY
SYNCHRO
POWER
STROBE
CLOCK
DATA
CH.SPACE
STEREO
TUNED
MONO
PLL
A
B

TUNER UNIT
(X05-404X-XX) (A/5) JAPAN MADE
(X05-405X-XX) (A/5) SINGAPORE MADE

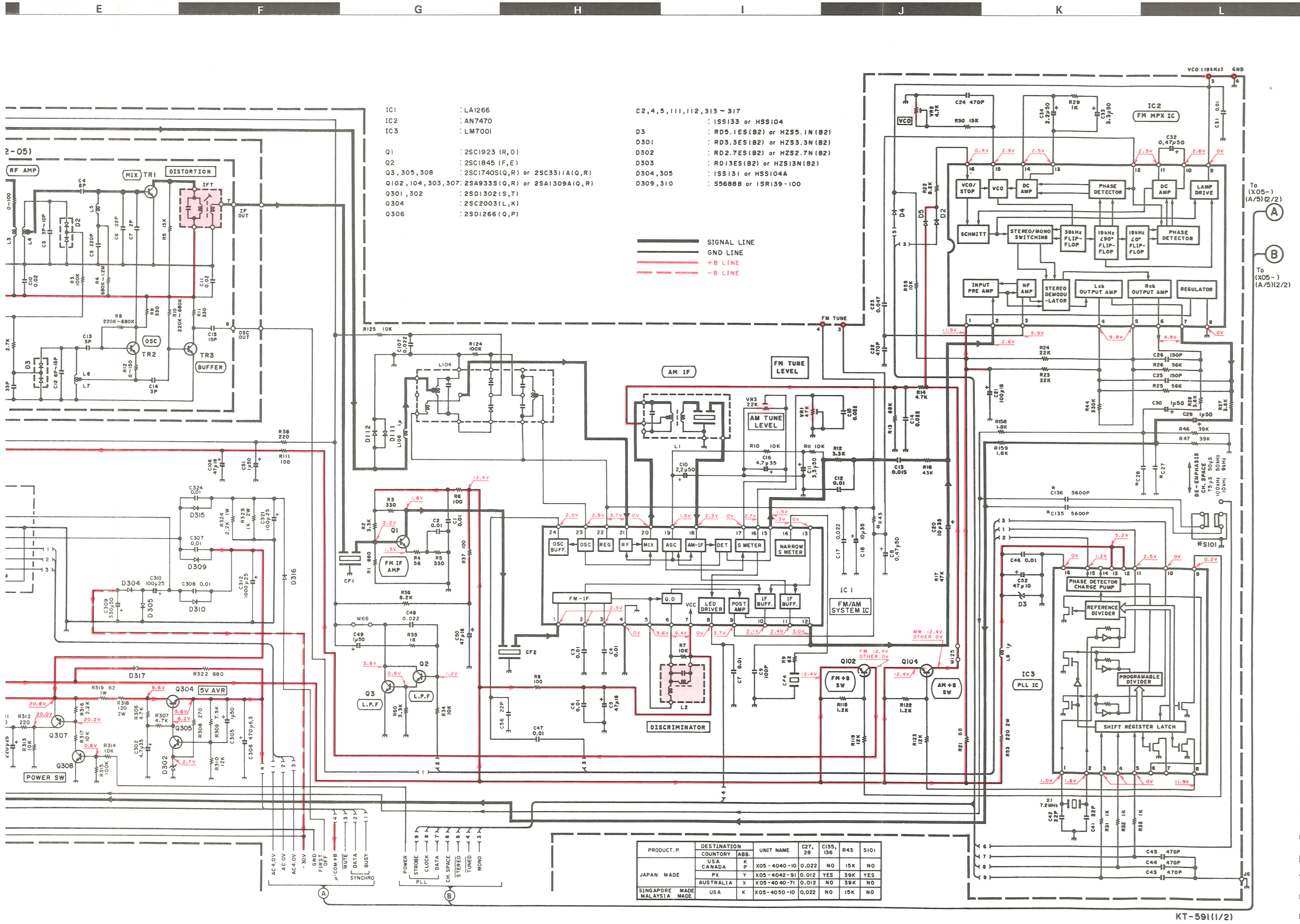
IC1 : LA1266
IC2 : AN7470
IC3 : LM7001

Q1 : 2SC1923 (R, O)
Q2 : 2SC1845 (F, E)
Q3, 305, 308 : 2SC1740S(Q, R) or 2SC3311A(Q, R)
Q102, 104, 303, 307 : 2SA933S(Q, R) or 2SA1309A(Q, R)
Q301, 302 : 2SD1302(S, T)
Q304 : 2SC2003(L, K)
Q306 : 2SD1266(Q, P)

C2, 4, 5, 111, 112, 313 ~ 317 : 1SS133 or HSS104
D3 : RD5.1ES(B2) or HZS5.1N(B2)
D301 : RD3.3ES(B2) or HZS3.3N(B2)
D302 : RD2.7ES(B2) or HZS2.7N(B2)
D303 : RD13ES(B2) or HZS13N(B2)
D304, 305 : 1SS131 or HSS104A
D309, 310 : S5688B or 1SR139-100

SIGNAL LINE
GND LINE
+B LINE
−B LINE

PRODUCT. P.	DESTINATION		UNIT NAME	C27, 28	C135, 136	R43	S101
	COUNTORY	ABB.					
JAPAN MADE	USA CANADA	K P	X05-4040-10	0.022	NO	15K	NO
	PX	Y	X05-4042-91	0.012	YES	39K	YES
	AUSTRALIA	X	X05-4040-71	0.012	NO	39K	NO
SINGAPORE MADE MALAYSIA MADE	USA	K	X05-4050-10	0.022	NO	15K	NO


E
F
G
H
I
J
K
L
M
N
RF AMP
MIX
TR1
DISTORTION
IFT
IF OUT
OSC
TR2
TR3
BUFFER
OSC OUT
AM IF
FM TUNE LEVEL
AM TUNE LEVEL
FM IF AMP
Q1
Q2
Q3
L.P.F
DISCRIMINATOR
OSC BUFF.
OSC
REG
RF
MIX
AGC
AM-IF
DET
S METER
NARROW S METER
FM-IF
Q.D
LED DRIVER
POST AMP
IF BUFF.
IC 1
FM/AM SYSTEM IC
Q102
FM+B SW
Q104
AM+B SW
VCO
VCO/STOP
DC AMP
PHASE DETECTOR
LAMP DRIVE
SCHMITT
STEREO/MONO SWITCHING
38kHz FLIP-FLOP
19kHz ∠90° FLIP-FLOP
19kHz ∠0° FLIP-FLOP
INPUT PRE AMP
NF AMP
STEREO DEMODU-LATOR
Lch OUTPUT AMP
Rch OUTPUT AMP
REGULATOR
IC2
FM MPX IC
To (X05-) (A/5)(2/2)
A
B
FM TUNE
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
PROGRAMABLE DIVIDER
SHIFT REGISTER LATCH
IC3
PLL IC
X1 7.2MHz
*S101
DE-EMPHASIS
CH. SPACE
Q304
5V AVR
Q305
Q307
Q308
POWER SW
D317
D304
D305
D309
D310
D315
D316
AC 4.0V
AC 0V
AC 4.0V
-30V
GND
FIRST OFF
μ-COM+B
MUTE
DATA
BUSY
SYNCHRO
POWER
STROBE
CLOCK
DATA
CH. SPACE
STEREO
TUNED
MONO
PLL
KT-591(1/2)

IC1 : LA1266
IC2 : AN7470
IC3 : LM7001

Q1 : 2SC1923 (R,O)
Q2 : 2SC1845 (F,E)
Q3,305,308 : 2SC1740S(Q,R) or 2SC3311A(Q,R)
Q102,104,303,307: 2SA933S(Q,R) or 2SA1309A(Q,R)
Q301,302 : 2SD1302(S,T)
Q304 : 2SC2003(L,K)
Q306 : 2SD1266(Q,P)

C2,4,5,111,112,313 ~ 317 : 1SS133 or HSS104
D3 : RD5.1ES(B2) or HZS5.1N(B2)
D301 : RD3.3ES(B2) or HZS3.3N(B2)
D302 : RD2.7ES(B2) or HZS2.7N(B2)
D303 : RD13ES(B2) or HZS13N(B2)
D304,305 : 1SS131 or HSS104A
D309,310 : S5688B or 1SR139-100

▬	SIGNAL LINE
—	GND LINE
🟥	+B LINE
- -	−B LINE

PRODUCT. P.	DESTINATION		UNIT NAME	C27, 28	C135, 136	R43	S101
	COUNTORY	ABB.					
JAPAN MADE	USA CANADA	K P	X05-4040-10	0.022	NO	15K	NO
	PX	Y	X05-4042-91	0.012	YES	39K	YES
	AUSTRALIA	X	X05-4040-71	0.012	NO	39K	NO
SINGAPORE MADE MALAYSIA MADE	USA	K	X05-4050-10	0.022	NO	15K	NO

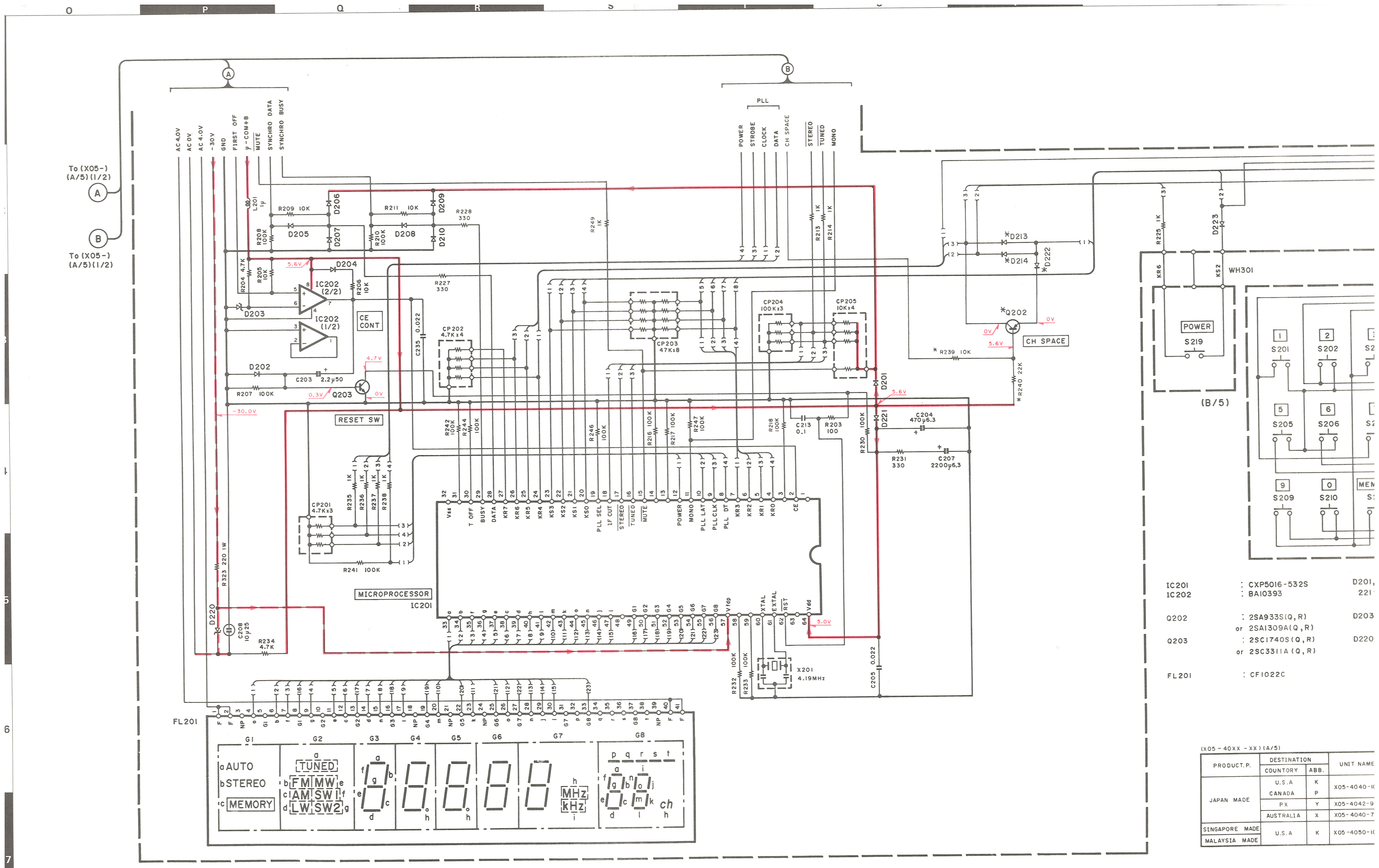
DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Y07-3420-10

KT-591

KENWOOD


O
P
Q
R
To (X05-) (A/5)(1/2)
To (X05-) (A/5)(1/2)
A
B
AC 4.0V
AC 0V
AC 4.0V
-30V
GND
FIRST OFF
y-COM+B
MUTE
SYNCHRO DATA
SYNCHRO BUSY
PLL
POWER
STROBE
CLOCK
DATA
CH SPACE
STEREO
TUNED
MONO
L201 1μ
R209 10K
R211 10K
R228 330
R249 1K
R213 1K
R214 1K
D205
D206
D207
D208
D209
D210
R208 100K
R210 100K
D204
5.6V
IC202 (2/2)
IC202 (1/2)
R204 4.7K
R205 10K
R206 10K
D203
R227 330
CE CONT
C235 0.022
CP202 4.7K×4
CP203 47K×8
CP204 100K×3
CP205 10K×4
D202
C203 2.2μ50
R207 100K
Q203
0.3V
0V
4.7V
RESET SW
-30.0V
R242 100K
R244 100K
R246 100K
R216 100K
R217 100K
R247 100K
R218 100K
C213 0.1
R203 100
R230 100K
D201
D221
5.6V
C204 470μ6.3
R231 330
C207 2200μ6.3
*Q202
0V
0V
5.6V
CH SPACE
*R239 10K
*R240 22K
*D213
*D214
*D222
R225 1K
D223
KR6
KS2
WH301
POWER
S219
(B/5)
S201
S202
S205
S206
S209
S210
MEM
CP201 4.7K×3
R235 1K
R236 1K
R237 1K
R238 1K
R241 100K
MICROPROCESSOR
IC201
Vss
T OFF
BUSY
DATA
KR7
KR6
KR5
KR4
KS3
KS2
KS1
KS0
PLL SEL
IF CUT
STEREO
TUNED
MUTE
POWER
MONO
PLL LAT
PLL CLK
PLL DT
KR3
KR2
KR1
KR0
CE
Vfdp
XTAL
EXTAL
RST
Vdd
5.0V
R323 220 1W
D220
C208 10μ25
R234 4.7K
R232 100K
R233 100K
X201 4.19MHz
C205 0.022
FL201
G1
G2
G3
G4
G5
G6
G7
G8
AUTO
STEREO
MEMORY
TUNED
FM
MW
AM
SW1
LW
SW2
MHz
kHz
ch

IC201 : CXP5016-532S
IC202 : BA10393

Q202 : 2SA933S(Q, R)
or 2SA1309A(Q, R)
Q203 : 2SC1740S(Q, R)
or 2SC3311A(Q, R)

FL201 : CF1022C

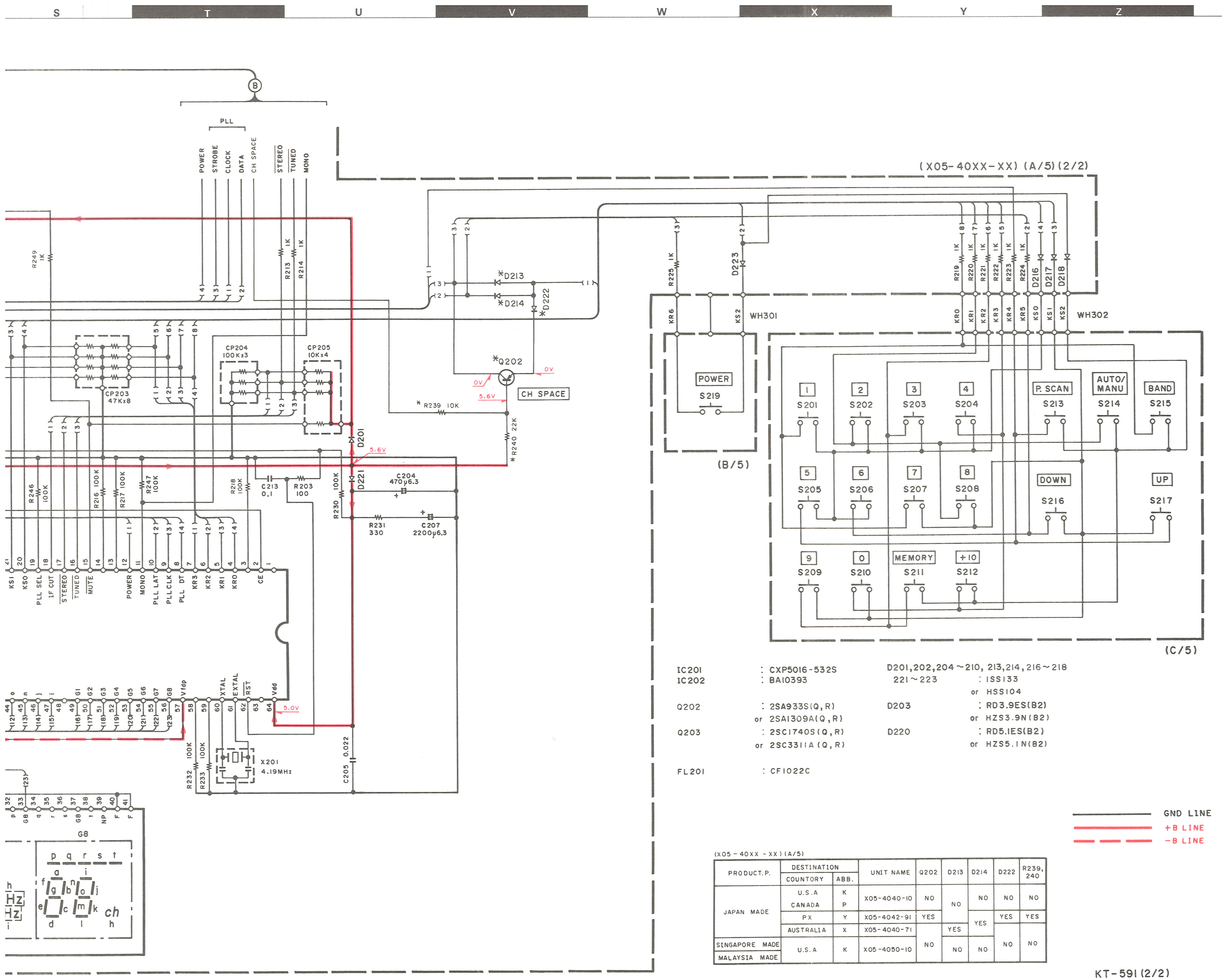
D201,
221

D203

D220

(X05-40XX-XX)(A/5)

PRODUCT.P.	DESTINATION		UNIT NAME
	COUNTORY	ABB.	
JAPAN MADE	U.S.A CANADA	K P	X05-4040-1
	PX	Y	X05-4042-9
	AUSTRALIA	X	X05-4040-7
SINGAPORE MADE MALAYSIA MADE	U.S.A	K	X05-4050-1


S
T
U
V
W
X
Y
Z
PLL
POWER
STROBE
CLOCK
DATA
CH SPACE
STEREO
TUNED
MONO
(X05-40XX-XX) (A/5) (2/2)
R249 1K
R213 1K
R214 1K
CP203 47K×8
CP204 100K×3
CP205 10K×4
*D213
*D214
*D222
*Q202
CH SPACE
0V
5.6V
*R239 10K
*R240 22K
D201
D221
5.6V
C204 470μ6.3
C207 2200μ6.3
R231 330
R230 100K
R203 100
C213 0.1
R218 100K
R246 100K
R216 100K
R217 100K
R247 100K
KS1
KS0
PLL SEL
IF CUT
STEREO
TUNED
MUTE
POWER
MONO
PLL LAT
PLL CLK
PLL DT
KR3
KR2
KR1
KR0
CE
Vfdp
XTAL
EXTAL
RST
Vdd
5.0V
X201 4.19MHz
R232 100K
R233 100K
C205 0.022
G8
p q r s t
ch
Hz
R225 1K
D223
KR6
KS2
WH301
POWER
S219
(B/5)
R219 1K
R220 1K
R221 1K
R222 1K
R223 1K
R224 1K
D216
D217
D218
KR0
KR1
KR2
KR3
KR4
KR5
KS0
KS1
KS2
WH302
1
S201
2
S202
3
S203
4
S204
P. SCAN
S213
AUTO/MANU
S214
BAND
S215
5
S205
6
S206
7
S207
8
S208
DOWN
S216
UP
S217
9
S209
0
S210
MEMORY
S211
+10
S212
(C/5)

IC201 : CXP5016-532S
IC202 : BA10393

Q202 : 2SA933S(Q,R)
or 2SA1309A(Q,R)
Q203 : 2SC1740S(Q,R)
or 2SC3311A(Q,R)

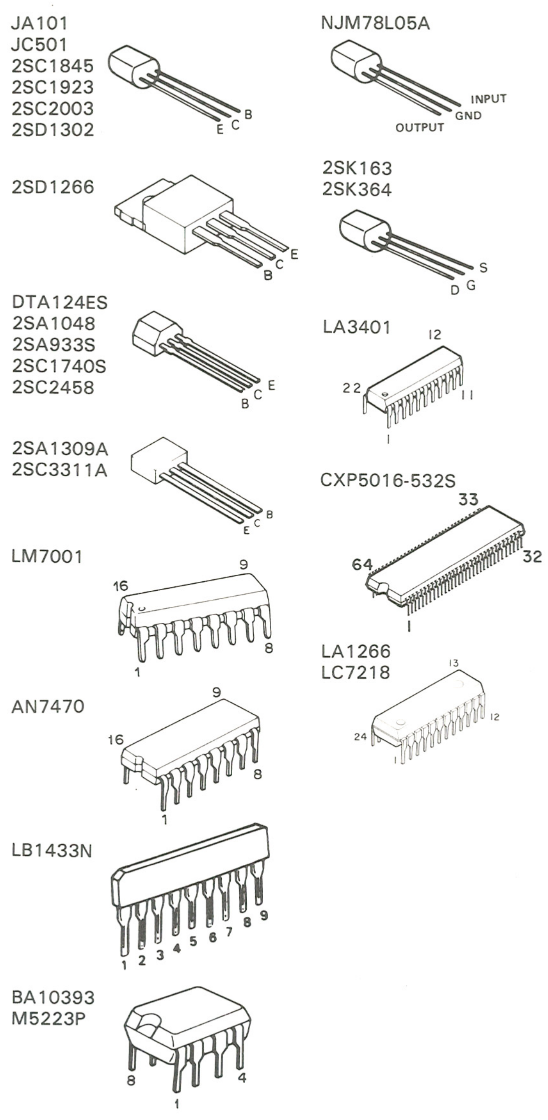
FL201 : CF1022C

D201,202,204～210, 213,214,216～218
221～223 : 1SS133
or HSS104
D203 : RD3.9ES(B2)
or HZS3.9N(B2)
D220 : RD5.1ES(B2)
or HZS5.1N(B2)

GND LINE
+B LINE
−B LINE

(X05-40XX-XX)(A/5)

PRODUCT.P.	DESTINATION COUNTORY	DESTINATION ABB.	UNIT NAME	Q202	D213	D214	D222	R239, 240
JAPAN MADE	U.S.A CANADA	K P	X05-4040-10	NO	NO	NO	NO	NO
	PX	Y	X05-4042-91	YES		YES	YES	YES
	AUSTRALIA	X	X05-4040-71	NO	YES		NO	NO
SINGAPORE MADE MALAYSIA MADE	U.S.A	K	X05-4050-10		NO	NO		


AA
AB
JA101
JC501
2SC1845
2SC1923
2SC2003
2SD1302
E C B
NJM78L05A
INPUT
GND
OUTPUT
2SD1266
B C E
2SK163
2SK364
D G S
DTA124ES
2SA1048
2SA933S
2SC1740S
2SC2458
B C E
LA3401
12
22
1
11
2SA1309A
2SC3311A
E C B
CXP5016-532S
33
64
32
1
LM7001
9
16
1
8
LA1266
LC7218
13
24
12
AN7470
9
16
1
8
LB1433N
1 2 3 4 5 6 7 8 9
BA10393
M5223P
8
4
1

DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual units or/and units. Values in parentheses are measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

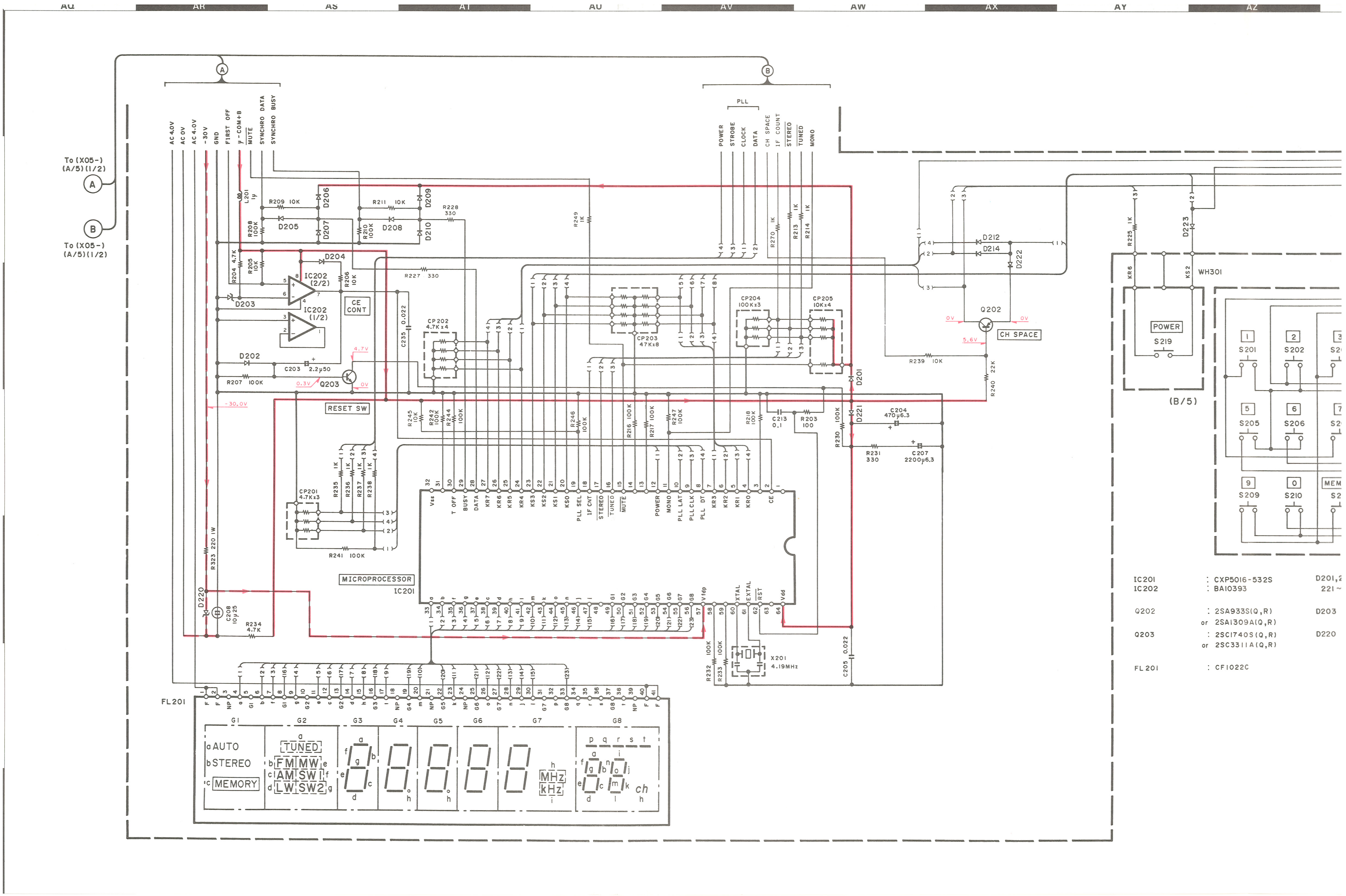
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

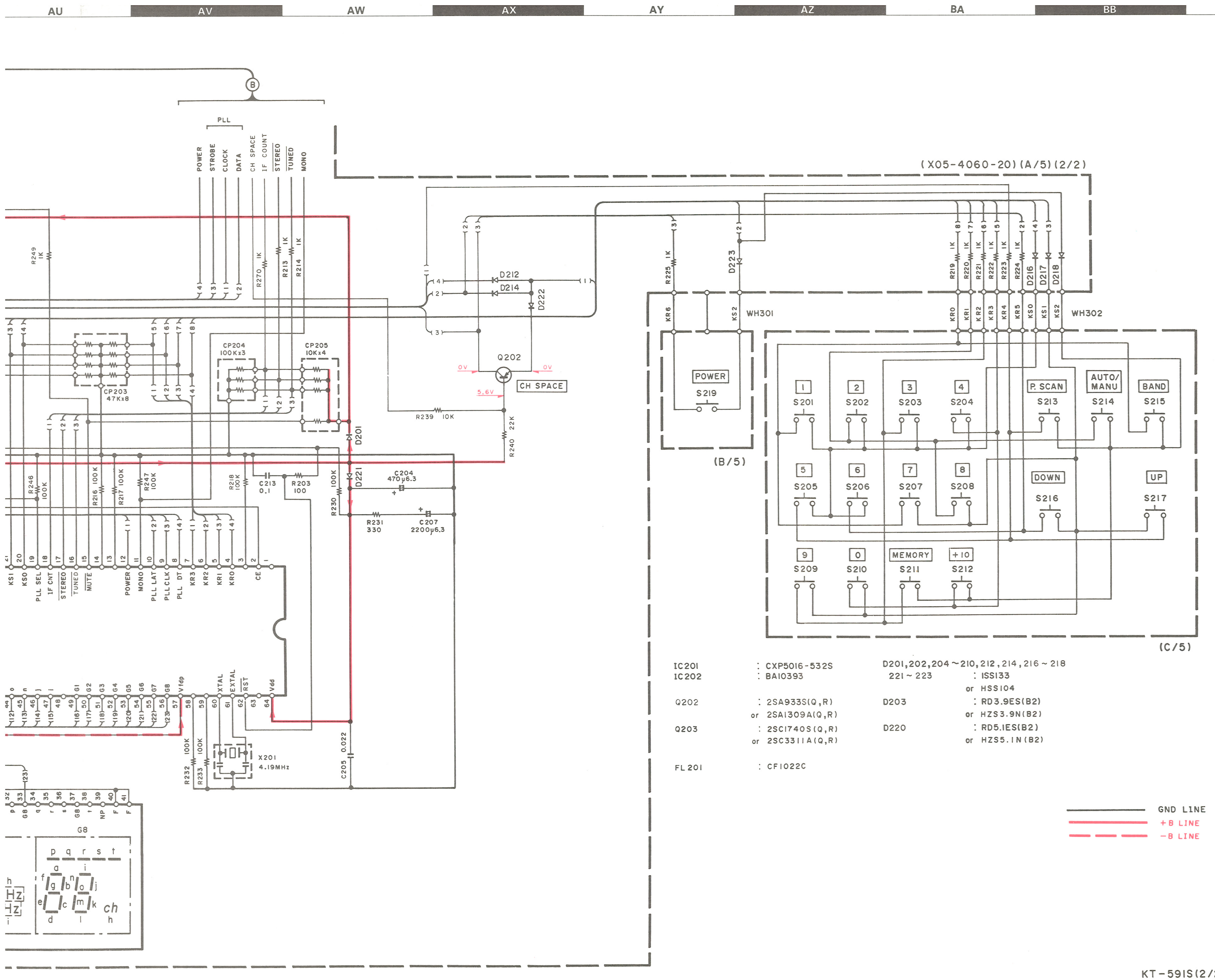
KT-591 (2/2)

Y07-3420-10

KT-591

KENWOOD


AQ
AR
AS
AT
AU
AV
AW
AX
AY
AZ
To (X05-) (A/5)(1/2)
A
B
To (X05-) (A/5)(1/2)
AC 4.0V
AC 0V
AC 4.0V
-30V
GND
FIRST OFF
y-COM+B
MUTE
SYNCHRO DATA
SYNCHRO BUSY
PLL
POWER
STROBE
CLOCK
DATA
CH SPACE
IF COUNT
STEREO
TUNED
MONO
L201 1μ
R209 10K
R208 100K
D205
D206
D207
R211 10K
R210 100K
D208
D209
D210
R228 330
R249 1K
R270 1K
R213 1K
R214 1K
D204
R204 4.7K
R205 10K
IC202 (2/2)
IC202 (1/2)
R206 10K
D203
CE CONT
R227 330
C235 0.022
CP202 4.7K×4
CP203 47K×8
CP204 100K×3
CP205 10K×4
D202
C203 2.2μ50
R207 100K
Q203
4.7V
0.3V
0V
RESET SW
-30.0V
R245 10K
R242 100K
R244 100K
R246 100K
R216 100K
R217 100K
R247 100K
R218 100K
C213 0.1
R203 100
R230 100K
D201
D221
C204 470μ6.3
R231 330
C207 2200μ6.3
D212
D214
D222
D223
Q202
0V
5.6V
CH SPACE
R239 10K
R240 22K
R225 1K
KR6
KS2
WH301
POWER
S219
(B/5)
S201
S202
S205
S206
S209
S210
MEM
CP201 4.7K×3
R235 1K
R236 1K
R237 1K
R238 1K
R241 100K
MICROPROCESSOR
IC201
Vss
T OFF
BUSY
DATA
KR7
KR6
KR5
KR4
KS3
KS2
KS1
KS0
PLL SEL
IF CNT
STEREO
TUNED
MUTE
POWER
MONO
PLL LAT
PLL CLK
PLL DT
KR3
KR2
KR1
KR0
CE
Vfdp
XTAL
EXTAL
RST
Vdd
R323 220 1W
D220
C208 10μ25
R234 4.7K
R232 100K
R233 100K
X201 4.19MHz
C205 0.022
FL201
G1
G2
G3
G4
G5
G6
G7
G8
AUTO
STEREO
MEMORY
TUNED
FM
MW
AM
SW1
LW
SW2
MHz
kHz
ch
IC201 : CXP5016-532S
IC202 : BA10393
Q202 : 2SA933S(Q,R) or 2SA1309A(Q,R)
Q203 : 2SC1740S(Q,R) or 2SC3311A(Q,R)
FL201 : CF1022C
D201,2
221~
D203
D220


AU
AV
AW
AX
AY
AZ
BA
BB
BC
BD
B
PLL
POWER
STROBE
CLOCK
DATA
CH SPACE
IF COUNT
STEREO
TUNED
MONO
(X05-4060-20) (A/5) (2/2)
R249 1K
R270 1K
R213 1K
R214 1K
D212
D214
D222
D223
R225 1K
Q202
CH SPACE
0V
5.6V
R239 10K
R240 22K
D201
D221
CP204 100K×3
CP205 10K×4
CP203 47K×8
R246 100K
R216 100K
R217 100K
R247 100K
R218 100K
C213 0.1
R203 100
R230 100K
C204 470μ6.3
R231 330
C207 2200μ6.3
R219 1K
R220 1K
R221 1K
R222 1K
R223 1K
R224 1K
D216
D217
D218
WH301
WH302
KR6
KS2
KR0
KR1
KR2
KR3
KR4
KR5
KS0
KS1
POWER
S219
(B/5)
1
S201
2
S202
3
S203
4
S204
P. SCAN
S213
AUTO/MANU
S214
BAND
S215
5
S205
6
S206
7
S207
8
S208
DOWN
S216
UP
S217
9
S209
0
S210
MEMORY
S211
+10
S212
(C/5)
KSI
KSO
PLL SEL
IF CNT
STEREO
TUNED
MUTE
POWER
MONO
PLL LAT
PLL CLK
PLL DT
KR3
KR2
KR1
KR0
CE
Vfdp
XTAL
EXTAL
RST
Vdd
R232 100K
R233 100K
X201 4.19MHz
C205 0.022
G8
p q r s t
a b c d e f g h i j k l m n o
Hz
ch

IC201 : CXP5016-532S
IC202 : BA10393

Q202 : 2SA933S(Q,R)
or 2SA1309A(Q,R)

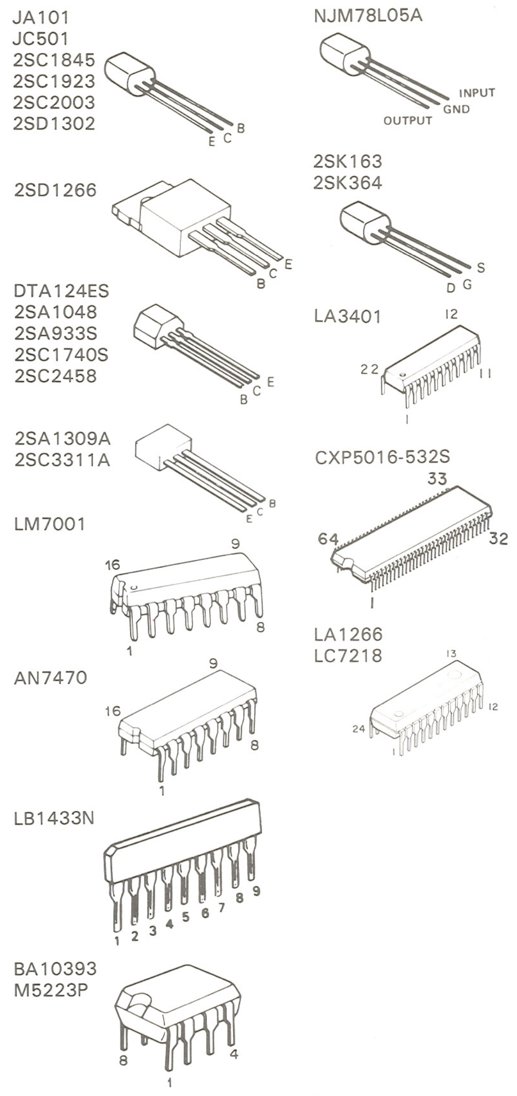
Q203 : 2SC1740S(Q,R)
or 2SC3311A(Q,R)

FL 201 : CF1022C

D201,202,204～210,212,214,216～218
221～223 : ISS133
or HSS104

D203 : RD3.9ES(B2)
or HZS3.9N(B2)

D220 : RD5.1ES(B2)
or HZS5.1N(B2)


JA101
JC501
2SC1845
2SC1923
2SC2003
2SD1302
E C B
NJM78L05A
INPUT
GND
OUTPUT
2SD1266
B C E
2SK163
2SK364
D G S
DTA124ES
2SA1048
2SA933S
2SC1740S
2SC2458
B C E
LA3401
12
22
11
1
2SA1309A
2SC3311A
E C B
CXP5016-532S
33
64
32
1
LM7001
16
9
1
8
LA1266
LC7218
13
24
12
AN7470
16
9
1
8
LB1433N
1 2 3 4 5 6 7 8 9
BA10393
M5223P
8
1
4

DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

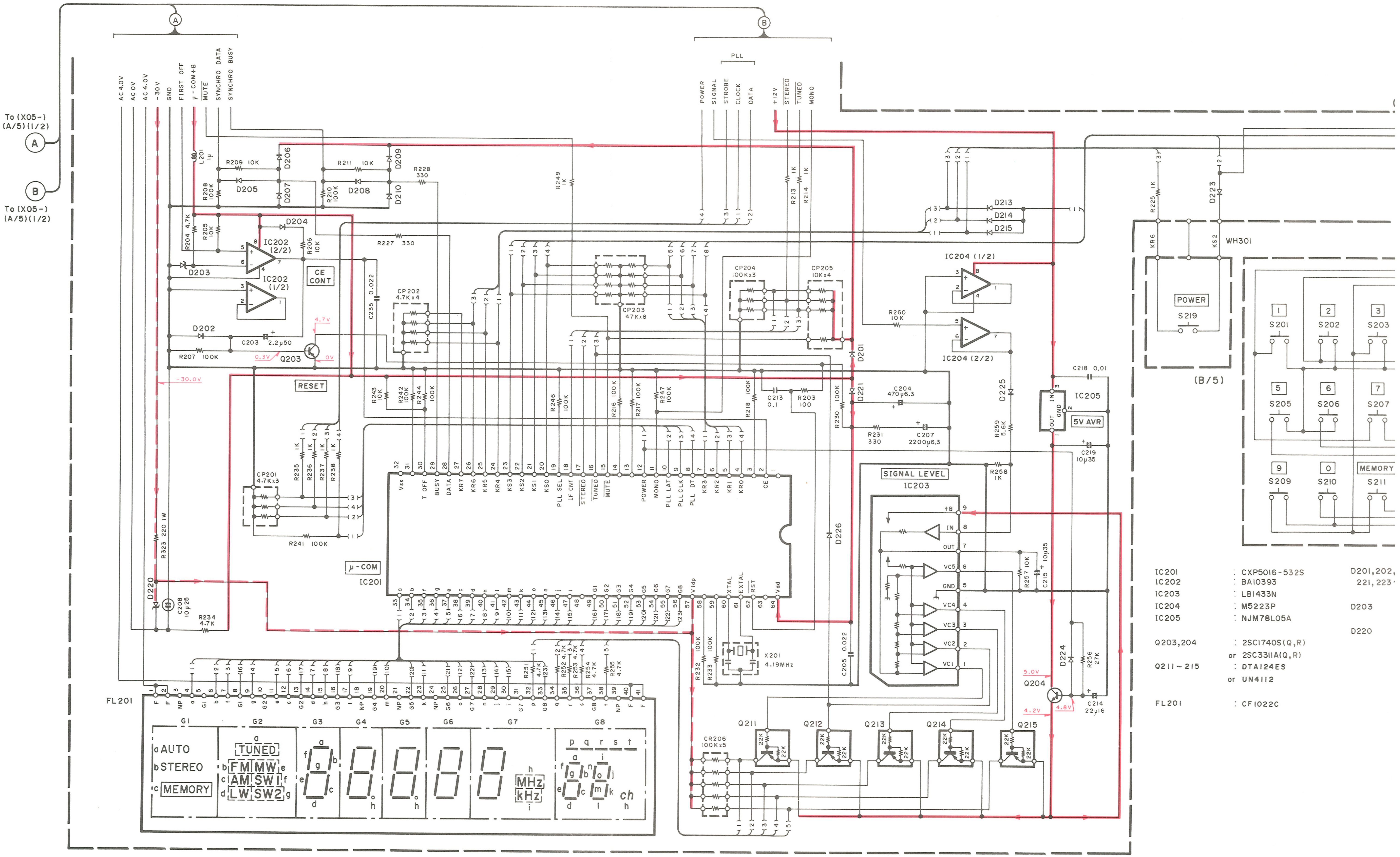
——— GND LINE
——— +B LINE
— — — −B LINE

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KT-591S(2/2)

Y07-3420-10

KT-591S
KENWOOD


To (X05-) (A/5)(1/2)
A
B
To (X05-) (A/5)(1/2)
AC 4.0V
AC 0V
AC 4.0V
-30V
GND
FIRST OFF
μ-COM+B
MUTE
SYNCHRO DATA
SYNCHRO BUSY
PLL
POWER
SIGNAL
STROBE
CLOCK
DATA
+12V
STEREO
TUNED
MONO
L201 1μ
R209 10K
D206
D205
D207
R208 100K
R211 10K
D209
R210 100K
D208
D210
R228 330
R249 1K
R213 1K
R214 1K
D213
D214
D215
R225 1K
D223
KR6
KS2
WH301
POWER
S219
(B/5)
D204
IC202 (2/2)
IC202 (1/2)
R204 4.7K
R205 10K
R206 10K
D203
CE CONT
R227 330
C235 0.022
CP202 4.7K x4
CP203 47K x8
CP204 100K x3
CP205 10K x4
IC204 (1/2)
IC204 (2/2)
R260 10K
D202
C203 2.2μ50
4.7V
R207 100K
0.3V
Q203
0V
RESET
-30.0V
R243 10K
R242 100K
R244 100K
R246 100K
R216 100K
R217 100K
R247 100K
R218 100K
C213 0.1
R203 100
R230 100K
D201
D221
C204 470μ6.3
R231 330
C207 2200μ6.3
D225
R259 5.6K
C218 0.01
IC205
IN
GND
OUT
5V AVR
C219 10μ35
R258 1K
SIGNAL LEVEL
IC203
+B
IN
OUT
VC5
GND
VC4
VC3
VC2
VC1
R257 10K
C215 10μ35
R235 1K
R236 1K
R237 1K
R238 1K
CP201 4.7K x3
R241 100K
R323 220 1W
D220
C208 10μ25
R234 4.7K
Vss
T OFF
BUSY
DATA
KR7
KR6
KR5
KR4
KS3
KS2
KS1
KS0
PLL SEL
IF CNT
STEREO
TUNED
MUTE
POWER
MONO
PLL LAT
PLL CLK
PLL DT
KR3
KR2
KR1
KR0
CE
μ-COM
IC201
Vfdp
XTAL
EXTAL
RST
Vdd
D226
R232 100K
R233 100K
X201 4.19MHz
C205 0.022
R252 4.7K
R253 4.7K
R254 4.7K
R251 4.7K
R255 4.7K
D224
R256 27K
5.0V
Q204
4.2V
4.8V
C214 22μ16
Q211
Q212
Q213
Q214
Q215
22K
CR206 100K x5
FL201
G1 G2 G3 G4 G5 G6 G7 G8
AUTO
STEREO
MEMORY
TUNED
FM
MW
AM
SW1
LW
SW2
MHz
kHz
ch
S201 S202 S203 S205 S206 S207 S209 S210 S211
1 2 3 5 6 7 9 0 MEMORY

IC201 : CXP5016-532S
IC202 : BA10393
IC203 : LB1433N
IC204 : M5223P
IC205 : NJM78L05A

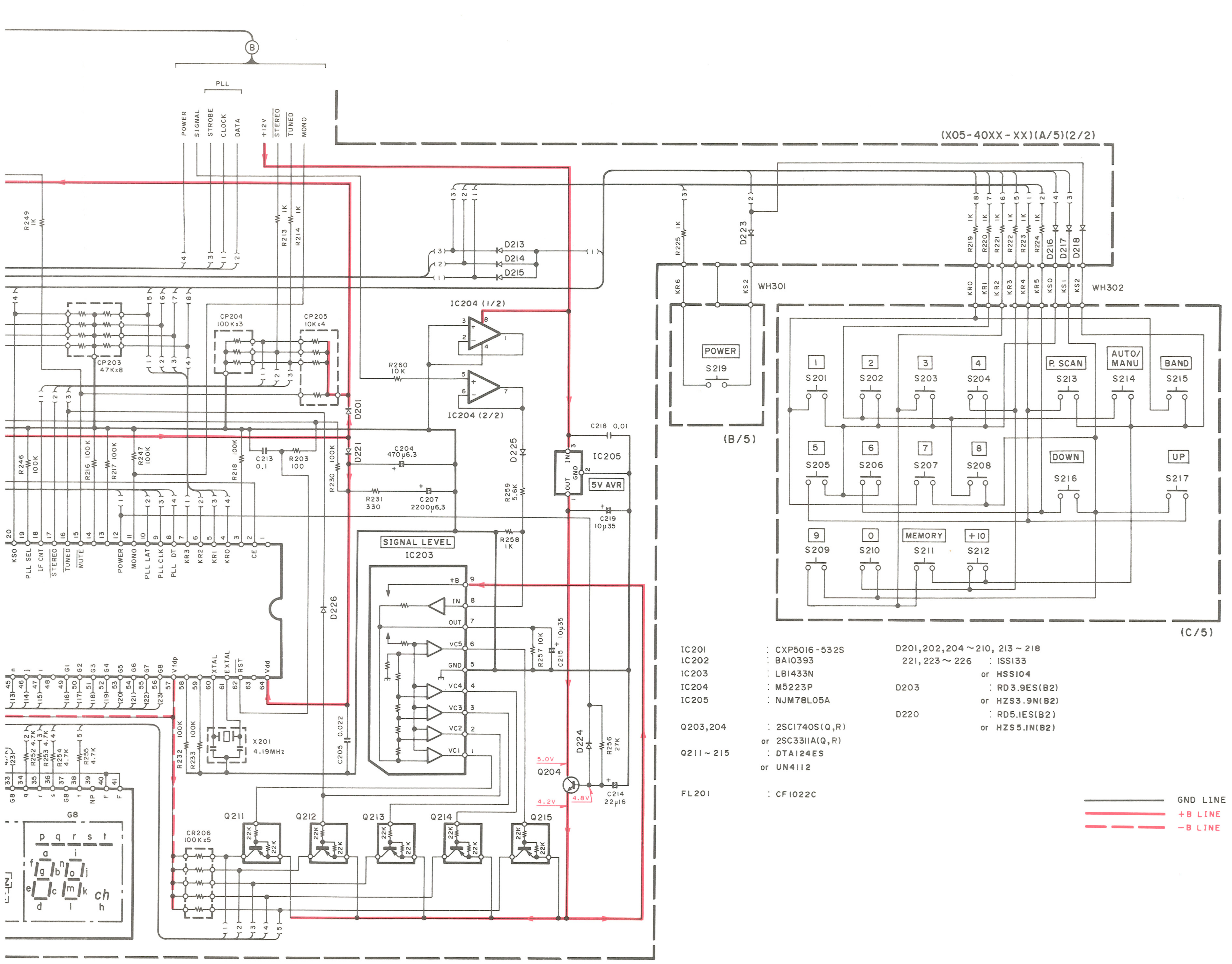
Q203,204 : 2SC1740S(Q,R)
or 2SC3311A(Q,R)
Q211～215 : DTA124ES
or UN4112

FL201 : CF1022C

D201,202,
221,223

D203

D220


(X05-40XX-XX)(A/5)(2/2)
PLL
POWER
SIGNAL
STROBE
CLOCK
DATA
+12V
STEREO
TUNED
MONO
R249 1K
R213 1K
R214 1K
D213
D214
D215
IC204 (1/2)
IC204 (2/2)
CP203 47K×8
CP204 100K×3
CP205 10K×4
R260 10K
D201
D221
D225
D226
D224
C204 470μ6.3
C213 0.1
R203 100
R218 100K
R230 100K
R231 330
C207 2200μ6.3
R259 5.6K
R246 100K
R216 100K
R217 100K
R247 100K
C218 0.01
IC205
5V AVR
IN
GND
OUT
C219 10μ35
R258 1K
SIGNAL LEVEL
IC203
+B
IN
OUT
VC5
GND
VC4
VC3
VC2
VC1
R257 10K
C215 10μ35
R256 27K
C214 22μ16
5.0V
4.2V
4.8V
Q204
Q211
Q212
Q213
Q214
Q215
22K
CR206 100K×5
X201 4.19MHz
R232 100K
R233 100K
C205 0.022
R252 4.7K
R253 4.7K
R254 4.7K
R255 4.7K
KS0
PLL SEL
IF CNT
STEREO
TUNED
MUTE
POWER
MONO
PLL LAT
PLL CLK
PLL DT
KR3
KR2
KR1
KR0
CE
XTAL
EXTAL
RST
Vdd
Vldp
G8
p q r s t
a b c d e f g h i j k l m n
ch
R225 1K
D223
KR6
KS2
WH301
R219 1K
R220 1K
R221 1K
R222 1K
R223 1K
R224 1K
D216
D217
D218
KR0
KR1
KR2
KR3
KR4
KR5
KS0
KS1
KS2
WH302
POWER
S219
(B/5)
1 S201
2 S202
3 S203
4 S204
P. SCAN S213
AUTO/MANU S214
BAND S215
5 S205
6 S206
7 S207
8 S208
DOWN S216
UP S217
9 S209
0 S210
MEMORY S211
+10 S212
(C/5)

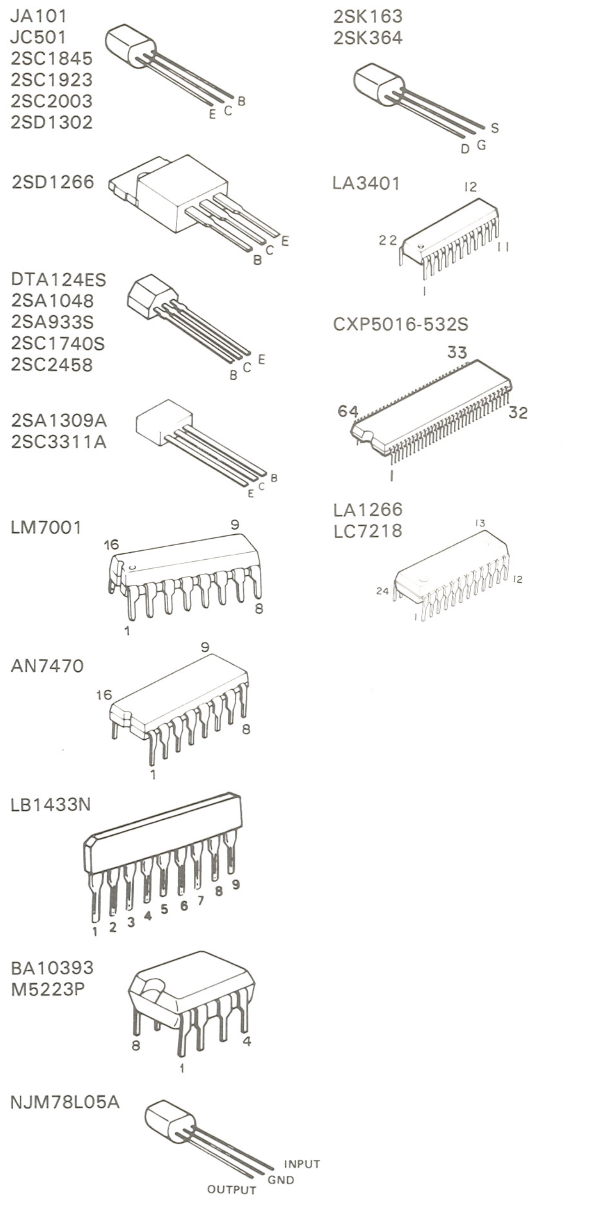
IC201 : CXP5016-532S
IC202 : BA10393
IC203 : LB1433N
IC204 : M5223P
IC205 : NJM78L05A

Q203,204 : 2SC1740S(Q,R)
or 2SC3311A(Q,R)
Q211~215 : DTA124ES
or UN4112

FL201 : CF1022C

D201,202,204~210, 213~218
221,223~226 : 1SS133
or HSS104
D203 : RD3.9ES(B2)
or HZS3.9N(B2)
D220 : RD5.1ES(B2)
or HZS5.1N(B2)

▬	GND LINE
🟥	+B LINE
‒ ‒ ‒	−B LINE


JA101
JC501
2SC1845
2SC1923
2SC2003
2SD1302
E C B
2SK163
2SK364
S G D
2SD1266
B C E
LA3401
12
22
11
1
DTA124ES
2SA1048
2SA933S
2SC1740S
2SC2458
B C E
CXP5016-532S
33
64
32
1
2SA1309A
2SC3311A
E C B
LA1266
LC7218
13
24
12
1
LM7001
16
9
1
8
AN7470
9
16
1
8
LB1433N
1 2 3 4 5 6 7 8 9
BA10393
M5223P
8
1
4
NJM78L05A
INPUT
GND
OUTPUT

DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

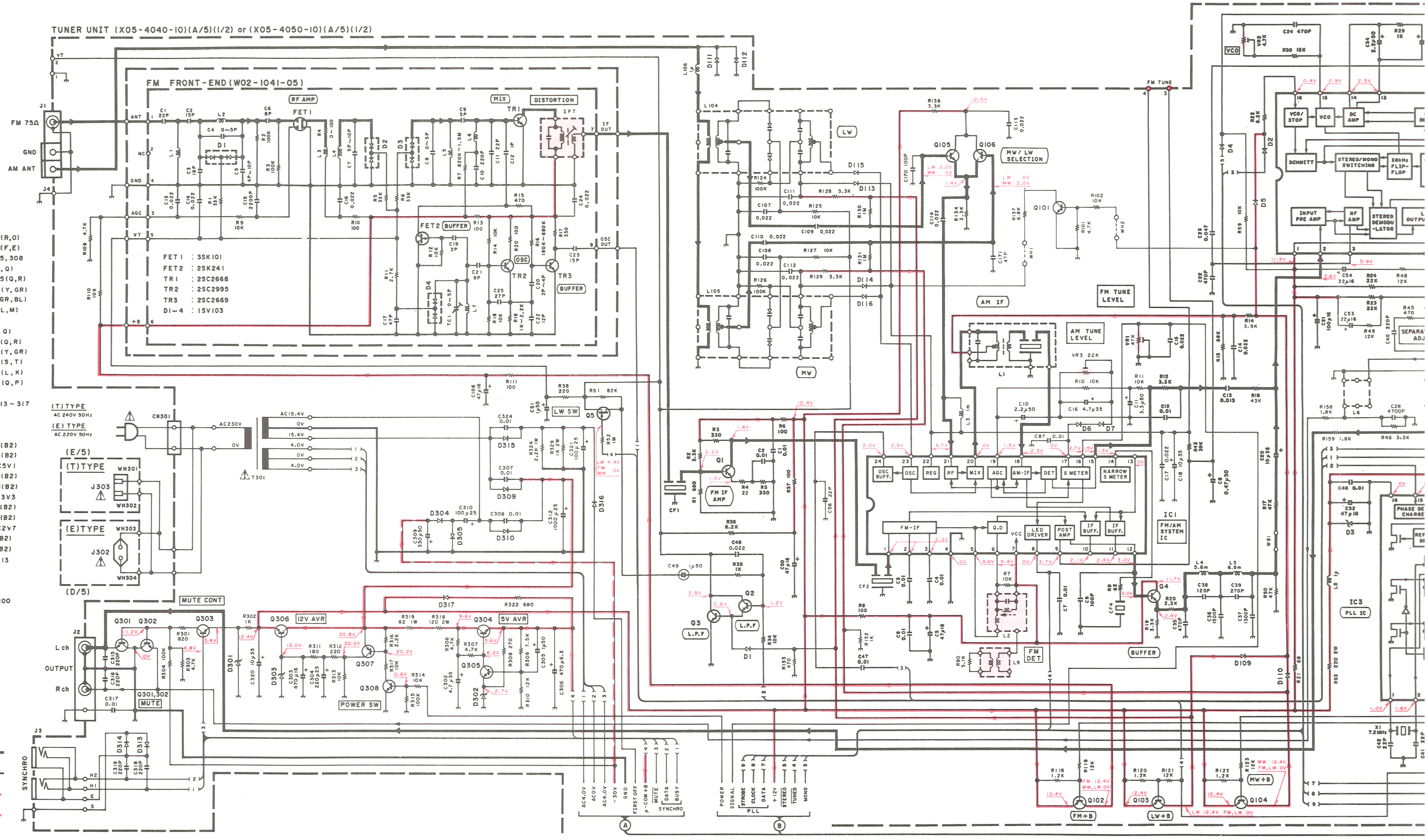
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KT-1030L (2/2)

Y07-3420-10

KT-1030L

KENWOOD

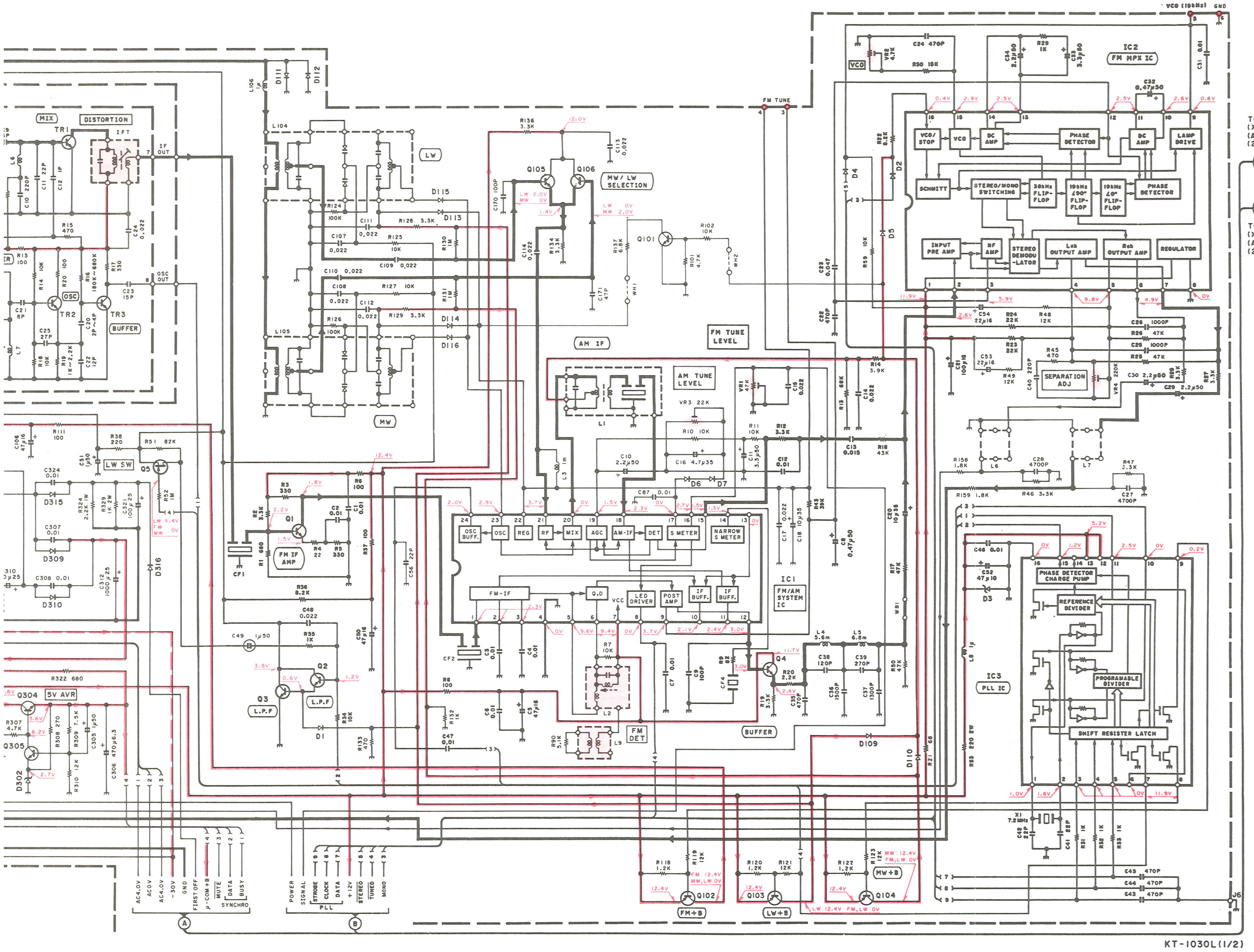

TUNER UNIT (X05-4040-10)(A/5)(1/2) or (X05-4050-10)(A/5)(1/2)
FM FRONT-END (W02-1041-05)
RF AMP
MIX
DISTORTION
FM 75Ω
GND
AM ANT
IF OUT
OSC OUT
FET2 BUFFER
OSC
TR2
TR3 BUFFER
FET1 : 3SK101
FET2 : 2SK241
TR1 : 2SC2668
TR2 : 2SC2995
TR3 : 2SC2669
D1~4 : 1SV103
LW
MW
MW/LW SELECTION
AM IF
FM TUNE LEVEL
AM TUNE LEVEL
FM IF AMP
LW SW
OSC BUFF.
OSC
REG
RF
MIX
AGC
AM-IF
DET
S METER
NARROW S METER
FM-IF
Q.D
LED DRIVER
POST AMP
IF BUFF.
IC1 FM/AM SYSTEM IC
FM DET
BUFFER
L.P.F
IC3 PLL IC
VCO
VCO/STOP
DC AMP
SCHMITT
STEREO/MONO SWITCHING
38kHz FLIP-FLOP
INPUT PRE AMP
RF AMP
STEREO DEMODULATOR
SEPARATION ADJ
PHASE DE CHARGE
(T) TYPE AC 240V 50Hz
(E) TYPE AC 220V 50Hz
(E/5)
(T)TYPE
(E)TYPE
(D/5)
AC230V
MUTE CONT
12V AVR
5V AVR
POWER SW
MUTE
OUTPUT
L ch
R ch
SYNCHRO
FM+B
LW+B
MW+B
AC4.0V
AC0V
AC4.0V
-30V
GND
FIRST OFF
μ-COM +B
MUTE
DATA
BUSY
SYNCHRO
POWER
SIGNAL
STROBE
CLOCK
DATA
+12V
STEREO
TUNED
MONO
PLL
Ⓐ
Ⓑ

IC1 : LA1266
IC2 : AN7470
IC3 : LM7001

Q1 : 2SC1923(R,O)
Q2 : 2SC1845(F,E)
Q3,4,101,105,106,305,308
: JC501(P,Q)
or 2SC1740S(Q,R)
or 2SC2458(Y,GR)
Q5 : 2SK364(GR,BL)
or 2SK163(L,M)
Q102~104,303,307
: JA101(P,Q)
or 2SA933S(Q,R)
or 2SA1048(Y,GR)
Q301,302 : 2SD1302(S,T)
Q304 : 2SC2003(L,K)
Q306 : 2SD1266(Q,P)

D1,2,4~7,109~116,313~317
: 1SS133
or HSS104
or 1N4148
D3 : RD5.1ES(B2)
or HZS5.1N(B2)
or BZX55-C5V1
D301 : RD3.3ES(B2)
or HZS3.3N(B2)
or BZX55-C3V3
D302 : RD2.7ES(B2)
or HZS2.7N(B2)
or BZX55-C2V7
D303 : RD13ES(B2)
or HZS13N(B2)
or BZX55-C13
D304,305 : 1SS131
or HSS104A
D309,310 : S5688
or 1SR139-100
or 1N4004

SIGNAL LINE
GND LINE
+B LINE
-B LINE


MIX
DISTORTION
TR1
IFT
IF OUT
OSC
TR2
TR3
BUFFER
OSC OUT
LW
MW
L104
L105
D111
D112
D113
D114
D115
D116
Q105
Q106
MW/LW SELECTION
Q101
AM IF
FM TUNE LEVEL
AM TUNE LEVEL
FM TUNE
L1
L2
L3
L9
D6
D7
IC1
FM/AM SYSTEM IC
OSC BUFF.
OSC
REG
RF
MIX
AGC
AM-IF
DET
S METER
NARROW S METER
FM-IF
Q.D
LED DRIVER
POST AMP
IF BUFF.
FM DET
BUFFER
Q1
FM IF AMP
Q2
Q3
L.P.F
D1
CF1
CF2
CF4
Q4
LW SW
Q5
D309
D310
D315
D316
Q304
Q305
5V AVR
D302
IC2
FM MPX IC
VCO
VCO/STOP
DC AMP
PHASE DETECTOR
LAMP DRIVE
SCHMITT
STEREO/MONO SWITCHING
38kHz FLIP-FLOP
19kHz ∠90° FLIP-FLOP
19kHz ∠0° FLIP-FLOP
INPUT PRE AMP
MF AMP
STEREO DEMODU-LATOR
Lch OUTPUT AMP
Rch OUTPUT AMP
REGULATOR
SEPARATION ADJ
VCO (19kHz)
GND
TO (X05-) (A/5) (2/2)
A
B
IC3
PLL IC
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
PROGRAMABLE DIVIDER
SHIFT REGISTER LATCH
X1 7.2MHz
D3
L6
L7
J6
Q102
FM+B
Q103
LW+B
Q104
MW+B
D109
D110
AC4.0V
AC4.0V
AC4.0V
-30V
GND
FIRST OFF
μ-COM+B
MUTE
DATA
BUSY
SYNCHRO
POWER
SIGNAL
STROBE
CLOCK
DATA
+12V
STEREO
TUNED
MONO
PLL
KT-1030L(1/2)

DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

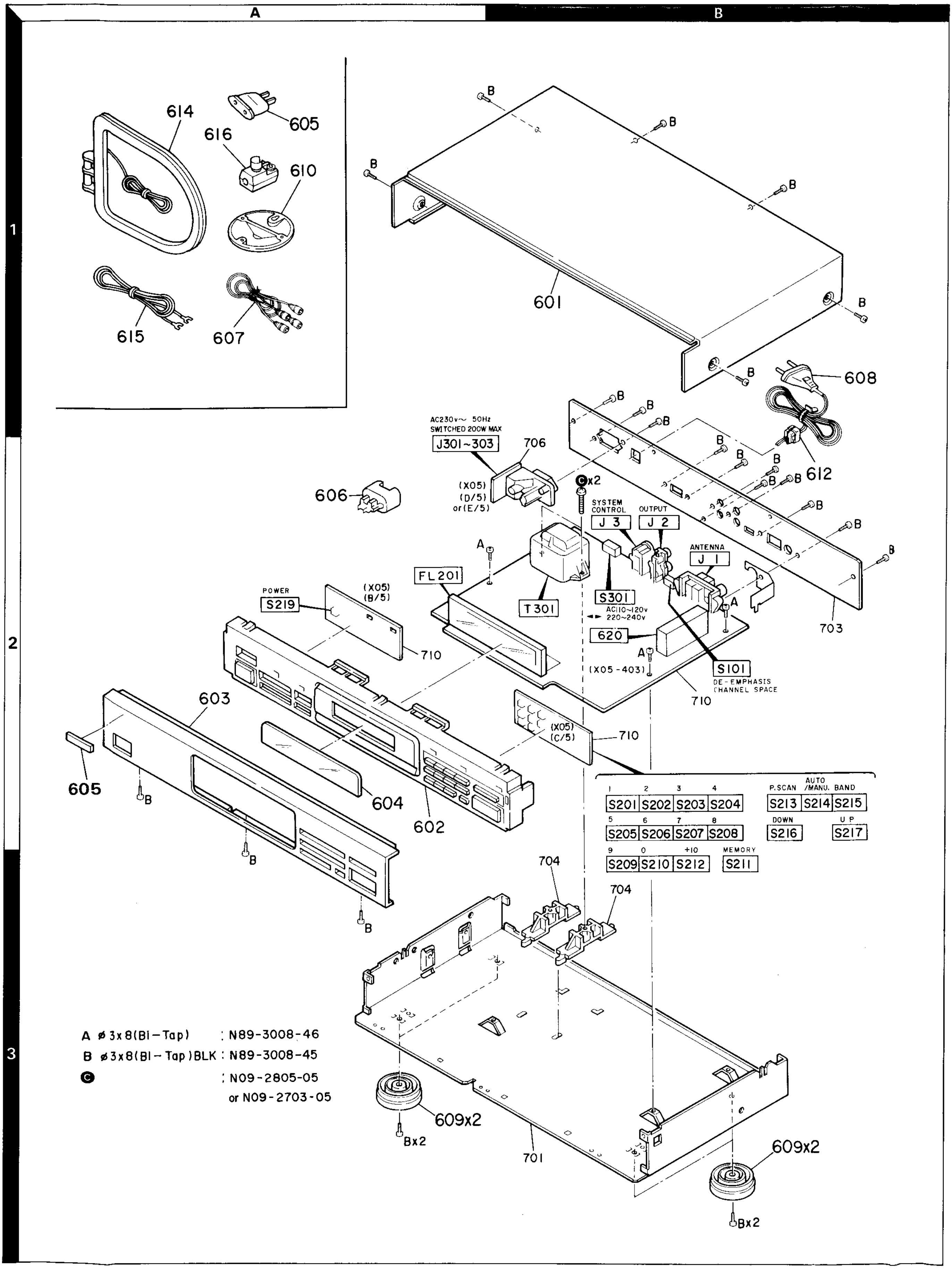
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Y07-3420-10

KT-1030L

KENWOOD

EXPLODED VIEW


A
B
1
2
3
614
605
616
610
615
607
601
608
612
703
AC230v~ 50Hz SWITCHED 200W MAX
J301~303
706
(X05)
(D/5)
or(E/5)
606
x2
SYSTEM CONTROL
J 3
OUTPUT
J 2
ANTENNA
J 1
A
FL201
T301
S301
AC110~120v
220~240v
620
S101
DE-EMPHASIS
CHANNEL SPACE
(X05-403)
710
POWER
S219
(X05)
(B/5)
710
603
605
604
602
(X05)
(C/5)
710
1 2 3 4
S201 S202 S203 S204
P.SCAN AUTO /MANU. BAND
S213 S214 S215
5 6 7 8
S205 S206 S207 S208
DOWN UP
S216 S217
9 0 +10 MEMORY
S209 S210 S212 S211
704
704
B
609x2
Bx2
701
609x2
Bx2

A ø3x8(BI-Tap) : N89-3008-46
B ø3x8(BI-Tap)BLK : N89-3008-45
● : N09-2805-05
or N09-2703-05

Parts with the exploded numbers larger than 700 are not supplied.

KT-591/591S/1030L

PARTS LIST

⁎ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
KT-591 (JAPAN MADE)						
601	1B	*	A01-1939-01	METALLIC CABINET		
602	2A	*	A22-1468-01	SUB PANEL		
603	2A	*	A60-0015-02	PANEL		
604	2A	*	B03-2689-03	DRESSING PLATE		
-			B46-0092-03	WARRANTY CARD	K	
-			B46-0094-03	WARRANTY CARD	Y	
-			B46-0095-03	WARRANTY CARD	Y	
-			B46-0096-23	WARRANTY CARD	X	
-			B46-0121-03	WARRANTY CARD	P	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-		*	B60-0324-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0325-00	INSTRUCTION MANUAL(FRENCH)	P	
⚠ 606	2A		E03-0114-05	AC OUTLET	X	
607	1A		E30-0615-05	AUDIO CORD		
⚠ 608	1B		E30-2594-15	AC POWER CORD	X	
⚠ 608	1B		E30-2605-05	AC POWER CORD	Y	
⚠ 608	1B	*	E30-2643-05	AC POWER CORD	KP	
-			H10-3780-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H50-0013-04	ITEM CARTON CASE		
609	3A,3B		J02-0366-15	FOOT		
610	1A		J19-2815-04	ANTENNA HOLDER		
⚠ 612	2B		J42-0083-05	POWER CORD BUSHING		
A			N89-3008-46	BINDING HEAD TAPTITE SCREW		
B			N89-3008-45	BINDING HEAD TAPTITE SCREW		
C		*	N09-2703-05	TAPTITE SCREW		
614	1A		T90-0173-05	LOOP ANTENNA		
615	1A		T90-0182-15	LEAD WIRE ANTENNA		
KT-591 (SINGAPORE, MALAYSIA MADE)						
601	1B	*	A01-1940-01	METALLIC CABINET		
602	2A	*	A22-1489-01	SUB PANEL		
603	2A	*	A60-0015-02	PANEL		
604	2A		B03-2721-03	DRESSING PLATE		
-			B46-0092-03	WARRANTY CARD		
-		*	B60-0324-00	INSTRUCTION MANUAL(ENGLISH)		
607	1A		E30-0615-05	AUDIO CORD		
⚠ 608	1B	*	E30-2643-05	AC POWER CORD		
-			H10-3819-02	POLYSTYRENE FOAMED FIXTURE	K	S
-		*	H10-5131-02	POLYSTYRENE FOAMED FIXTURE	K	W
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H50-0014-04	ITEM CARTON CASE	K	S
-		*	H50-0090-04	ITEM CARTON CASE	K	W
609	3A,3B		J02-0366-15	FOOT		
610	1A		J19-2815-04	ANTENNA HOLDER		
⚠ 612	2B		J42-0083-05	POWER CORD BUSHING		
A			N89-3008-46	BINDING HEAD TAPTITE SCREW		
B			N89-3008-45	BINDING HEAD TAPTITE SCREW		

E: Scandinavia & Europe K: USA P: Canada
Y: PX(Far East, Hawaii) T: England M: Other Areas
Y: AAFES(Europe) X: Australia

S: SINGAPORE MADE
W: MALAYSIA MADE

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
C			N09-2805-05	TAPTITE SCREW		
614	1A		T90-0174-05	LOOP ANTENNA		
615	1A		T90-0182-15	LEAD WIRE ANTENNA		
KT-591S						
601	1B	*	A01-1939-01	METALLIC CABINET		
602	2A	*	A22-1468-01	SUB PANEL		
603	2A	*	A60-0016-02	PANEL		
604	2A	*	B03-2689-03	DRESSING PLATE		
-		*	B60-0324-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0326-00	INSTRUCTION MANUAL(S,A,C)		
⚠ 605	1A		E03-0115-05	AC PLUG ADAPTER		
607	1A		E30-0615-05	AUDIO CORD		
⚠ 608	1B		E30-2592-15	AC POWER CORD		
-			H10-3780-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H50-0089-04	ITEM CARTON CASE		
609	3A,3B		J02-0366-15	FOOT		
610	1A		J19-2815-04	ANTENNA HOLDER		
⚠ 612	2B		J42-0083-05	POWER CORD BUSHING		
A			N89-3008-46	BINDING HEAD TAPTITE SCREW		
B			N89-3008-45	BINDING HEAD TAPTITE SCREW		
C		*	N09-2703-05	TAPTITE SCREW		
614	1A		T90-0173-05	LOOP ANTENNA		
615	1A		T90-0182-15	LEAD WIRE ANTENNA		
KT-1030L (FRANCE MADE)						
601	1B	*	A01-1931-01	METALLIC CABINET		
602	2A	*	A22-1495-01	SUB PANEL		
603	2A	*	A60-0017-02	PANEL		
604	2A	*	B03-2718-03	DRESSING PLATE		
-			B46-0139-03	WARRANTY CARD		
-		*	B60-0327-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0328-00	INSTRUCTION MANUAL(F,G,D,I)		
605	2A		B43-0287-04	KENWOOD BADGE		
607	1A		E30-0505-05	AUDIO CORD		
⚠ 608	1B		E30-2592-15	AC POWER CORD		
-			H10-3781-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H50-0070-04	ITEM CARTON CASE		
609	3A,3B		J02-1024-05	FOOT		
610	1A		J19-2815-04	ANTENNA HOLDER		
⚠ 612	2B		J42-0083-05	POWER CORD BUSHING		
A			N89-3008-46	BINDING HEAD TAPTITE SCREW		
B			N89-3008-45	BINDING HEAD TAPTITE SCREW		
C		*	N09-2703-05	TAPTITE SCREW		
614	1A		T90-0153-05	LOOP ANTENNA		
615	1A		T90-0176-05	T TYPE ANTENNA		
616	1A		T90-0177-05	ANTENNA ADAPTOR		

E: Scandinavia & Europe **K**: USA **P**: Canada
Y: PX(Far East, Hawaii) **T**: England **M**: Other Areas
Y: AAFES(Europe) **X**: Australia

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
KT-1030L (SINGAPORE MADE)						
601	1B	*	A01-1940-01	METALLIC CABINET		
602	2A	*	A22-1488-01	SUB PANEL		
603	2A	*	A60-0017-02	PANEL		
604	2A	*	B03-2722-03	DRESSING PLATE		
-			B46-0122-13	WARRANTY CARD	E	
-			B46-0143-13	WARRANTY CARD	T	
-		*	B60-0327-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B60-0328-00	INSTRUCTION MANUAL(F,G,D,I)	E	
605	2A		B43-0287-04	KENWOOD BADGE		
607	1A		E30-0505-05	AUDIO CORD		
⚠ 608	1B		E30-2592-15	AC POWER CORD	E	
⚠ 608	1B		E30-2593-15	AC POWER CORD	T	
-			H10-3819-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
-		*	H50-0015-04	ITEM CARTON CASE	T	
-		*	H50-0069-04	ITEM CARTON CASE	E	
609	3A,3B		J02-1024-05	FOOT	TE	
610	1A		J19-2815-04	ANTENNA HOLDER		
⚠ 612	2B		J42-0083-05	POWER CORD BUSHING		
A			N89-3008-46	BINDING HEAD TAPTITE SCREW		
B			N89-3008-45	BINDING HEAD TAPTITE SCREW		
C			N09-2805-05	TAPTITE SCREW		
614	1A		T90-0174-05	LOOP ANTENNA		
615	1A		T90-0175-05	T TYPE ANTENNA	TE	
616	1A		T90-0177-05	ANTENNA ADAPTOR	TE	
KT-591 TUNER UNIT (X05-404X-XX) (0-10: K,P, 2-91: Y, 0-71: X)						
C1 -4			CK45FF1H103Z	CERAMIC 0.010UF Z		
C5			CE04KW1C470M	ELECTRO 47UF 16WV		
C6 ,7			CK45FF1H103Z	CERAMIC 0.010UF Z		
C8			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C9			CC45FSL1H101J	CERAMIC 100PF J		
C10			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C11			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		
C12			CK45FF1H103Z	CERAMIC 0.010UF Z		
C13			CQ92FM1H153J	MYLAR 0.015UF J		
C14 ,15			CK45FF1H223Z	CERAMIC 0.022UF Z		
C16			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C17			CK45FF1H223Z	CERAMIC 0.022UF Z		
C18			CE04KW1V100M	ELECTRO 10UF 35WV		
C20			CE04KW1V100M	ELECTRO 10UF 35WV		
C21			CE04KW1C101M	ELECTRO 100UF 16WV		
C22			CK45FB1H471K	CERAMIC 470PF K		
C23			CF92FV1H473J	MF 0.047UF J		
C24			CC93FCH1H471J	CERAMIC 470PF J		
C25 ,26			CC45FSL1H151J	CERAMIC 150PF J		
C27 ,28		*	CQ92FM1H123J	MYLAR 0.012UF J	YX	
C27 ,28			CQ92FM1H223J	MYLAR 0.022UF J	KP	
C29 ,30			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C31			CK45FF1H103Z	CERAMIC 0.010UF Z		
C32			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C33			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		

E: Scandinavia & Europe K: USA P: Canada
Y: PX(Far East, Hawaii) T: England M: Other Areas
Y: AAFES(Europe) X: Australia

⚠ indicates safety critical components.

PARTS LIST

* New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti- nation 仕向	Re- marks 備考
C34			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C41 ,42			CC45FCH1H220J	CERAMIC 22PF J		
C43 -45			CK45FB1H471K	CERAMIC 470PF K		
C46 ,47			CK45FF1H103Z	CERAMIC 0.010UF Z		
C48			CQ92FM1H223J	MYLAR 0.022UF J		
C49			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C50			CE04KW1C470M	ELECTRO 47UF 16WV		
C51			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C52			CE04KW1A470M	ELECTRO 47UF 10WV		
C56			CC45FSL1H220J	CERAMIC 22PF J		
C106			CE04KW1C470M	ELECTRO 47UF 16WV		
C107			CK45FF1H223Z	CERAMIC 0.022UF Z		
C135,136			CQ92FM1H562J	MYLAR 5600PF J	Y	
C203			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C204			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C205			CK45FF1H223Z	CERAMIC 0.022UF Z		
C207			CE04KW0J222M	ELECTRO 2200UF 6.3WV		
C208			C90-1332-05	NP-ELEC 10UF 25WV		
C213			CF92FV1H104J	MF 0.10UF J		
C235			CK45FF1H223Z	CERAMIC 0.022UF Z		
C302			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C303			CE04DW1C471M	ELECTRO 470UF 16WV		
C304			CE04KW1E221M	ELECTRO 220UF 25WV		
C305			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C306			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C307,308			CK45FF1H103Z	CERAMIC 0.010UF Z		
C309			CE04KW1H331M	ELECTRO 330UF 50WV		
C310			CE04KW1E101M	ELECTRO 100UF 25WV		
C312			CE04KW1E102M	ELECTRO 1000UF 25WV		
C317			CK45FF1H103Z	CERAMIC 0.010UF Z		
C318,319			C91-0749-05	CERAMIC 220PF K		
C320			CE04KW1V100M	ELECTRO 10UF 35WV		
C321			CE04KW1E101M	ELECTRO 100UF 25WV		
C324			CK45FF1H103Z	CERAMIC 0.010UF Z		
J1	2B		E20-0476-05	LOCK TERMINAL BOARD (ANTENNA)		
J2	2B		E13-0235-05	PHONO JACK (OUTPUT)		
J3	2B		E11-0188-05	MINIATURE PHONE JACK(S.CONTROL		
⚠ J301	2A	*	E03-0119-05	AC OUTLET	KPY	
CF1 ,2			L72-0531-05	CERAMIC FILTER		
CF4			L72-0096-05	CERAMIC FILTER		
L1			L30-0488-05	AM IFT		
L2			L30-0439-25	FM IFT		
L8			L40-1091-17	SMALL FIXED INDUCTOR(1uH)		
L104			L39-0189-05	COMBINATION COIL		
L106			L40-1091-17	SMALL FIXED INDUCTOR(1uH)		
L201			L40-1091-17	SMALL FIXED INDUCTOR(1uH)		
⚠ T301	2B	*	L07-0247-05	POWER TRANSFORMER	KP	
⚠ T301	2B	*	L07-0248-05	POWER TRANSFORMER	Y	
⚠ T301	2B	*	L07-0249-05	POWER TRANSFORMER	X	
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHz)		
X201			L78-0209-05	RESONATOR (4.194MHz)		
X201			L78-0218-05	RESONATOR (4.194MHz)		
CP201			R90-0832-05	MULTI-COMP 4.7KX3 J 1/6W		
CP202			R90-0487-05	MULTI-COMP 47KX4 J 1/6W		

E: Scandinavia & Europe **K**: USA **P**: Canada

Y: PX(Far East, Hawaii) **T**: England **M**: Other Areas

Y: AAFES(Europe) **X**: Australia

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
CP203			R90-0804-05	MULTI-COMP 47KX8 J 1/4W		
CP204			R90-0850-05	MULTIPLE RESISTOR 100KX3		
CP205			R90-0809-05	MULTIPLE RESISTOR 10KX4		
R53			RS14DB3D221J	FL-PROOF RS 220 J 2W		
R318			RS14DB3D121J	FL-PROOF RS 120 J 2W		
R319			RS14DB3A820J	FL-PROOF RS 82 J 1W		
R321			R92-0173-05	RC 2.2M M 1/2W	KP	
R323			RS14DB3A221J	FL-PROOF RS 220 J 1W		
R324			RS14DB3A222J	FL-PROOF RS 2.2K J 1W		
R329			RS14DB3D102J	FL-PROOF RS 1.0K J 2W		
VR1		*	R12-3688-05	TRIMMING POT(47K)FM TUNE LEVEL		
VR2		*	R12-1619-05	TRIMMING POT(4.7K)VCO		
VR3			R12-3686-05	TRIMMING POT(22K)AM TUNE LEVEL		
S101	2B		S31-2094-05	SLIDE SWITCH(DE-EM.,CH SPACE)	Y	
S201-217	2B		S40-1064-05	PUSH SWITCH		
S219	2A		S40-1064-05	PUSH SWITCH (POWER)		
⚠ S301	2B		S31-2131-05	SLIDE SWITCH(POWER TYPE)	Y	
D2			HSS104	DIODE		
D2			1SS133	DIODE		
D3			HZS5.1N(B2)	ZENER DIODE		
D3			RD5.1ES(B2)	ZENER DIODE		
D4 ,5			HSS104	DIODE		
D4 ,5			1SS133	DIODE		
D111,112			HSS104	DIODE		
D111,112			1SS133	DIODE		
D201,202			HSS104	DIODE		
D201,202			1SS133	DIODE		
D203			HZS3.9N(B2)	ZENER DIODE		
D203			RD3.9ES(B2)	ZENER DIODE		
D204-210			HSS104	DIODE		
D204-210			1SS133	DIODE		
D213			HSS104	DIODE	X	
D213			1SS133	DIODE	X	
D214			HSS104	DIODE	YX	
D214			1SS133	DIODE	YX	
D216-218			HSS104	DIODE		
D216-218			1SS133	DIODE		
D220			HZS5.1N(B2)	ZENER DIODE		
D220			RD5.1ES(B2)	ZENER DIODE		
D221			HSS104	DIODE		
D221			1SS133	DIODE		
D222			HSS104	DIODE	Y	
D222			1SS133	DIODE	Y	
D223			HSS104	DIODE		
D223			1SS133	DIODE		
D301			HZS3.3N(B2)	ZENER DIODE		
D301			RD3.3ES(B2)	ZENER DIODE		
D302			HZS2.7N(B2)	ZENER DIODE		
D302			RD2.7ES(B2)	ZENER DIODE		
D303			HZS13N(B2)	ZENER DIODE		
D303			RD13ES(B2)	ZENER DIODE		
D304,305			HSS104A	DIODE		
D304,305			1SS131	DIODE		
D309,310			S5688B	DIODE		

E: Scandinavia & Europe K: USA P: Canada

Y: PX(Far East, Hawaii) T: England M: Other Areas

Y: AAFES(Europe) X: Australia

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
D309,310			1SR139-100	DIODE		
D313-317			HSS104	DIODE		
D313-317			1SS133	DIODE		
FL201	2A	*	CF1022C	FLUORESCENT INDICATOR TUBE		
IC1			LA1266	IC(AM/FM IF)		
IC2			AN7470	IC(FM MPX)		
IC3			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
IC201		*	CXP5016-532S	IC(4BIT MICROCONPUTER)		
IC202			BA10393	IC(DUAL COMPALATOR)		
Q1			2SC1923(R,O)	TRANSISTOR		
Q2			2SC1845(F,E)	TRANSISTOR		
Q3			2SC1740S(Q,R)	TRANSISTOR		
Q3			2SC3311A(Q,R)	TRANSISTOR		
Q102		*	2SA1309A(Q,R)	TRANSISTOR		
Q102			2SA933S(Q,R)	TRANSISTOR		
Q104		*	2SA1309A(Q,R)	TRANSISTOR		
Q104			2SA933S(Q,R)	TRANSISTOR		
Q202		*	2SA1309A(Q,R)	TRANSISTOR	Y	
Q202			2SA933S(Q,R)	TRANSISTOR	Y	
Q203			2SC1740S(Q,R)	TRANSISTOR		
Q203			2SC3311A(Q,R)	TRANSISTOR		
Q301,302			2SD1302(S,T)	TRANSISTOR		
Q303		*	2SA1309A(Q,R)	TRANSISTOR		
Q303			2SA933S(Q,R)	TRANSISTOR		
Q304			2SC2003(L,K)	TRANSISTOR		
Q305			2SC1740S(Q,R)	TRANSISTOR		
Q305			2SC3311A(Q,R)	TRANSISTOR		
Q306			2SD1266(Q,P)	TRANSISTOR		
Q307		*	2SA1309A(Q,R)	TRANSISTOR		
Q307			2SA933S(Q,R)	TRANSISTOR		
Q308			2SC1740S(Q,R)	TRANSISTOR		
Q308			2SC3311A(Q,R)	TRANSISTOR		
620	2B		W02-1042-05	FM FRONT-END ASSY		
KT-591S TUNER UNIT (X05-4060-20)						
C1 -4			CK45FF1H103Z	CERAMIC 0.010UF Z		
C5			CE04KW1C470M	ELECTRO 47UF 16WV		
C6 ,7			CK45FF1H103Z	CERAMIC 0.010UF Z		
C8			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C9			CC45FSL1H101J	CERAMIC 100PF J		
C10			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C11			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		
C12			CK45FF1H223Z	CERAMIC 0.022UF Z		
C13			CQ92FM1H223J	MYLAR 0.022UF J		
C14 ,15			CK45FF1H223Z	CERAMIC 0.022UF Z		
C16			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C17			CK45FF1H223Z	CERAMIC 0.022UF Z		
C18			CE04KW1C101M	ELECTRO 100UF 16WV		
C20			CE04KW1V100M	ELECTRO 10UF 35WV		
C21			CE04KW1C101M	ELECTRO 100UF 16WV		
C27 ,28		*	CQ92FM1H133J	MYLAR 0.013UF J		
C29 ,30			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C41			CC45FCH1H220J	CERAMIC 22PF J		
C42			CC45FCH1H270J	CERAMIC 27PF J		
C43 -45			CK45FB1H471K	CERAMIC 470PF K		

E: Scandinavia & Europe　K: USA　P: Canada

Y: PX(Far East, Hawaii)　T: England　M: Other Areas

Y: AAFES(Europe)　X: Australia

⚠ indicates safety critical components.

PARTS LIST

⋇ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Telle ohne **Parts No.** werden nicht gellefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
C46			CK45FF1H103Z	CERAMIC 0.010UF Z		
C47			C91-0769-05	CERAMIC 0.01UF K		
C49			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C50			CE04KW1C470M	ELECTRO 47UF 16WV		
C51			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C52			CE04KW1A470M	ELECTRO 47UF 10WV		
C56			CC45FSL1H220J	CERAMIC 22PF J		
C62 -64			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C65			CE04KW1HR22M	ELECTRO 0.22UF 50WV		
C66			CE04KW1V100M	ELECTRO 10UF 35WV		
C67 ,68			CC45FSL1H101J	CERAMIC 100PF J		
C69			CE04KW1V100M	ELECTRO 10UF 35WV		
C70			CK45FB1H561K	CERAMIC 560PF K		
C71			CQ92FM1H103J	MYLAR 0.010UF J		
C81			CQ92FM1H223J	MYLAR 0.022UF J		
C82			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C83			CK45FB1H471K	CERAMIC 470PF K		
C85			CC45FSL1H101J	CERAMIC 100PF J		
C86			CK45FF1H223Z	CERAMIC 0.022UF Z		
C106			CE04KW1C470M	ELECTRO 47UF 16WV		
C108			CK45FF1H223Z	CERAMIC 0.022UF Z		
C110			C91-0085-05	CERAMIC 0.022UF N		
C112,113			CK45FF1H223Z	CERAMIC 0.022UF Z		
C114			C91-0085-05	CERAMIC 0.022UF N		
C135,136			CQ92FM1H682J	MYLAR 6800PF J		
C152,153			CK45FF1H223Z	CERAMIC 0.022UF Z		
C154,155			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C156-159			CK45FF1H223Z	CERAMIC 0.022UF Z		
C160,161			C91-0085-05	CERAMIC 0.022UF N		
C162,163			CK45FF1H223Z	CERAMIC 0.022UF Z		
C164		*	CC93FCH1H272J	CERAMIC 2700PF J		
C166			CC45FCH1H120J	CERAMIC 12PF J		
C167		*	C91-1431-05	CERAMIC 0.0068UF J		
C168			CK45FF1H223Z	CERAMIC 0.022UF Z		
C169			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C171			C91-0745-05	CERAMIC 100PF K		
C203			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C204			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C205			CK45FF1H223Z	CERAMIC 0.022UF Z		
C207			CE04KW0J222M	ELECTRO 2200UF 6.3WV		
C208			C90-1332-05	NP-ELEC 10UF 25WV		
C213			CF92FV1H104J	MF 0.10UF J		
C235			CK45FF1H223Z	CERAMIC 0.022UF Z		
C302			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C303			CE04DW1C471M	ELECTRO 470UF 16WV		
C304			CE04KW1E221M	ELECTRO 220UF 25WV		
C305			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C306			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C307,308			CK45FF1H103Z	CERAMIC 0.010UF Z		
C309			CE04KW1H331M	ELECTRO 330UF 50WV		
C310			CE04KW1E101M	ELECTRO 100UF 25WV		
C312			CE04KW1E102M	ELECTRO 1000UF 25WV		
C317			CK45FF1H103Z	CERAMIC 0.010UF Z		
C318,319			CC45FSL1H221J	CERAMIC 220PF J		
C320			CE04KW1V100M	ELECTRO 10UF 35WV		

E: Scandinavia & Europe	**K**: USA	**P**: Canada
Y: PX(Far East, Hawaii)	**T**: England	**M**: Other Areas
Y: AAFES(Europe)	**X**: Australia	

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
C321			CE04KW1E101M	ELECTRO 100UF 25WV		
C324			CK45FF1H103Z	CERAMIC 0.010UF Z		
TC101			C05-0216-05	CERAMIC TRIMMER CAPACITOR(10PF		
J1	2B		E20-0476-05	LOCK TERMINAL BOARD (ANTENNA)		
J2	2B		E13-0235-05	PHONO JACK (OUTPUT)		
J3	2B		E11-0188-05	MINIATURE PHONE JACK(S.CONTROL		
⚠ J302	2A		E03-0108-05	AC OUTLET		
CF1 ,2			L72-0531-05	CERAMIC FILTER		
L1			L30-0467-05	AM IFT		
L2			L30-0439-25	FM IFT		
L3			L40-1021-14	SMALL FIXED INDUCTOR(1.0mH,K)		
L8			L40-1091-17	SMALL FIXED INDUCTOR(1.0uH)		
L105			L39-0192-05	COMBINATION COIL		
L106			L40-1091-17	SMALL FIXED INDUCTOR(1.0uH)		
L107		*	L39-0199-05	COMBINATION COIL		
L108		*	L31-0608-05	SW-RF COIL		
L109		*	L32-0528-05	SW OSCILLATING COIL		
L110			L40-1021-14	SMALL FIXED INDUCTOR(1.0mH,K)		
L201			L40-1091-17	SMALL FIXED INDUCTOR(1.0uH)		
⚠ T301	2B	*	L07-0248-05	POWER TRANSFORMER		
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHz)		
X2			L78-0208-05	RESONATOR (456KHZ)		
X201			L78-0209-05	RESONATOR (4.194MHZ)		
X201			L78-0218-05	RESONATOR (4.194MHz)		
CP201			R90-0832-05	MULTI-COMP 4.7KX3 J 1/6W		
CP202			R90-0487-05	MULTI-COMP 47KX4 J 1/6W		
CP203			R90-0804-05	MULTI-COMP 47KX8 J 1/4W		
CP204			R90-0850-05	MULTIPLE RESISTOR 100KX3		
CP205			R90-0809-05	MULTIPLE RESISTOR 10KX4		
R53			RS14DB3D221J	FL-PROOF RS 220 J 2W		
R318			RS14DB3D121J	FL-PROOF RS 120 J 2W		
R319			RS14DB3A820J	FL-PROOF RS 82 J 1W		
R323			RS14DB3A221J	FL-PROOF RS 220 J 1W		
R324			RS14DB3A222J	FL-PROOF RS 2.2K J 1W		
R329			RS14DB3D102J	FL-PROOF RS 1.0K J 2W		
VR1		*	R12-3688-05	TRIMMING POT(47K)FM TUNE LEVEL		
VR3			R12-3686-05	TRIMMING POT(22K)AM TUNE LAVEL		
VR5		*	R12-6663-05	TRIMMING POT(330K)SEPARATION		
S101	2B		S31-2094-05	SLIDE SWITCH(DE-EM.,CH SPACE)		
S201-217	2B		S40-1064-05	PUSH SWITCH		
S219	2A		S40-1064-05	PUSH SWITCH (POWER)		
⚠ S301	2B		S31-2131-05	SLIDE SWITCH(POWER TYPE)		
D3			HZS5.1N(B2)	ZENER DIODE		
D3			RD5.1ES(B2)	ZENER DIODE		
D11			HSS104	DIODE		
D11			1SS133	DIODE		
D109-112			HSS104	DIODE		
D109-112			1SS133	DIODE		
D114			HSS104	DIODE		
D114			1SS133	DIODE		
D116			HSS104	DIODE		
D116			1SS133	DIODE		
D123-130			HSS104	DIODE		

E: Scandinavia & Europe **K**: USA **P**: Canada
Y: PX(Far East, Hawaii) **T**: England **M**: Other Areas
Y: AAFES(Europe) **X**: Australia

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
D123-130			1SS133	DIODE		
D131			KV1260	VARIABLE CAPACITANCE DIODE		
D132-135			HSS104	DIODE		
D132-135			1SS133	DIODE		
D201,202			HSS104	DIODE		
D201,202			1SS133	DIODE		
D203			HZS3.9N(B2)	ZENER DIODE		
D203			RD3.9ES(B2)	ZENER DIODE		
D204-210			HSS104	DIODE		
D204-210			1SS133	DIODE		
D212			HSS104	DIODE		
D212			1SS133	DIODE		
D214			HSS104	DIODE		
D214			1SS133	DIODE		
D216-218			HSS104	DIODE		
D216-218			1SS133	DIODE		
D220			HZS5.1N(B2)	ZENER DIODE		
D220			RD5.1ES(B2)	ZENER DIODE		
D221-223			HSS104	DIODE		
D221-223			1SS133	DIODE		
D301			HZS3.3N(B2)	ZENER DIODE		
D301			RD3.3ES(B2)	ZENER DIODE		
D302			HZS2.7N(B2)	ZENER DIODE		
D302			RD2.7ES(B2)	ZENER DIODE		
D303			HZS13N(B2)	ZENER DIODE		
D303			RD13ES(B2)	ZENER DIODE		
D304,305			HSS104A	DIODE		
D304,305			1SS131	DIODE		
D309,310			S5688B	DIODE		
D309,310			1SR139-100	DIODE		
D313-317			HSS104	DIODE		
D313-317			1SS133	DIODE		
FL201	2A	*	CF1022C	FLUORESCENT INDICATOR TUBE		
IC1			LA1266	IC(AM/FM IF)		
IC3			LC7218	IC(PLL SYNTHESIZER)		
IC4			LA3401	IC(FM MPX)		
IC201		*	CXP5016-532S	IC(4BIT MICROCONPUTER)		
IC202			BA10393	IC(DUAL COMPALATOR)		
Q1			2SC1923(R,O)	TRANSISTOR		
Q2			2SC1845(F,E)	TRANSISTOR		
Q3			2SC1740S(Q,R)	TRANSISTOR		
Q3			2SC3311A(Q,R)	TRANSISTOR		
Q7			2SC1740S(Q,R)	TRANSISTOR		
Q7			2SC3311A(Q,R)	TRANSISTOR		
Q8			2SC1845(F,E)	TRANSISTOR		
Q9			2SC1740S(Q,R)	TRANSISTOR		
Q9			2SC3311A(Q,R)	TRANSISTOR		
Q101			2SC1740S(Q,R)	TRANSISTOR		
Q101			2SC3311A(Q,R)	TRANSISTOR		
Q102-104		*	2SA1309A(Q,R)	TRANSISTOR		
Q102-104			2SA933S(Q,R)	TRANSISTOR		
Q105,106			2SC1740S(Q,R)	TRANSISTOR		
Q105,106			2SC3311A(Q,R)	TRANSISTOR		
Q110		*	2SA1309A(Q,R)	TRANSISTOR		
Q110			2SA933S(Q,R)	TRANSISTOR		

E: Scandinavia & Europe **K**: USA **P**: Canada

Y: PX(Far East, Hawaii) **T**: England **M**: Other Areas

Y: AAFES(Europe) **X**: Australia

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
Q202		*	2SA1309A(Q,R)	TRANSISTOR		
Q202			2SA933S(Q,R)	TRANSISTOR		
Q203			2SC1740S(Q,R)	TRANSISTOR		
Q203			2SC3311A(Q,R)	TRANSISTOR		
Q301,302			2SD1302(S,T)	TRANSISTOR		
Q303		*	2SA1309A(Q,R)	TRANSISTOR		
Q303			2SA933S(Q,R)	TRANSISTOR		
Q304			2SC2003(L,K)	TRANSISTOR		
Q305			2SC1740S(Q,R)	TRANSISTOR		
Q305			2SC3311A(Q,R)	TRANSISTOR		
Q306			2SD1266(Q,P)	TRANSISTOR		
Q307		*	2SA1309A(Q,R)	TRANSISTOR		
Q307			2SA933S(Q,R)	TRANSISTOR		
Q308			2SC1740S(Q,R)	TRANSISTOR		
Q308			2SC3311A(Q,R)	TRANSISTOR		
620	2B		W02-1042-05	FM FRONT-END ASSY		
KT-1030L TUNER UNIT (X05-4050-51: T, X05-4052-71: E, X05-4042-71: E (FRANCE MADE)						
C1 -4			CK45FF1H103Z	CERAMIC 0.010UF Z		
C5			CE04KW1C470M	ELECTRO 47UF 16WV		
C6 ,7			CK45FF1H103Z	CERAMIC 0.010UF Z		
C8			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C9			CC45FSL1H101J	CERAMIC 100PF J		
C10			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C11			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		
C12			CK45FF1H103Z	CERAMIC 0.010UF Z		
C13			CQ92FM1H153J	MYLAR 0.015UF J		
C14 ,15			CK45FF1H223Z	CERAMIC 0.022UF Z		
C16			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C17			CK45FF1H223Z	CERAMIC 0.022UF Z		
C18			CE04KW1V100M	ELECTRO 10UF 35WV		
C20			CE04KW1V100M	ELECTRO 10UF 35WV		
C21			CE04KW1C101M	ELECTRO 100UF 16WV		
C22			CK45FB1H471K	CERAMIC 470PF K		
C23			CF92FV1H473J	MF 0.047UF J		
C24			CC93FCH1H471J	CERAMIC 470PF J		
C25 ,26			CK45FB1H102K	CERAMIC 1000PF K		
C27 ,28			CQ92FM1H472J	MYLAR 4700PF J		
C29 ,30			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C31			CK45FF1H103Z	CERAMIC 0.010UF Z		
C32			CE04KW1HR47M	ELECTRO 0.47UF 50WV		
C33			CE04KW1H3R3M	ELECTRO 3.3UF 50WV		
C34			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C35			CK45FB1H471K	CERAMIC 470PF K		
C36			CQ92FM1H152J	MYLAR 1500PF J		
C37		*	CQ92FM1H132J	MYLAR 1300PF J		
C38			CC45FSL1H121J	CERAMIC 120PF J		
C39			CC45FSL1H271J	CERAMIC 270PF J		
C40			CC45FSL1H221J	CERAMIC 220PF J		
C41 ,42			CC45FCH1H220J	CERAMIC 22PF J		
C43 -45			CK45FB1H471K	CERAMIC 470PF K		
C46 ,47			CK45FF1H103Z	CERAMIC 0.010UF Z		
C48			CQ92FM1H223J	MYLAR 0.022UF J		
C49			C90-1349-05	NP-ELEC 1UF 50WV		
C50			CE04KW1C470M	ELECTRO 47UF 16WV		

E: Scandinavia & Europe **K**: USA **P**: Canada
Y: PX(Far East, Hawaii) **T**: England **M**: Other Areas
Y: AAFES(Europe) **X**: Australia

⚠ indicates safety critical components.

PARTS LIST

※ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
C51			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C52			CE04KW1A470M	ELECTRO 47UF 10WV		
C53 ,54			CE04KW1C220M	ELECTRO 22UF 16WV		
C56			CC45FSL1H220J	CERAMIC 22PF J		
C87			CK45FF1H103Z	CERAMIC 0.010UF Z		
C106			CE04KW1C470M	ELECTRO 47UF 16WV		
C107,108			CK45FF1H223Z	CERAMIC 0.022UF Z		
C109,110			C91-0085-05	CERAMIC 0.022UF N		
C111-113			CK45FF1H223Z	CERAMIC 0.022UF Z		
C114			C91-0085-05	CERAMIC 0.022UF N		
C170			C91-0745-05	CERAMIC 100PF K		
C171			C91-0737-05	CERAMIC 47PF J		
C203			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C204			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C205			CK45FF1H223Z	CERAMIC 0.022UF Z		
C207			CE04KW0J222M	ELECTRO 2200UF 6.3WV		
C208			C90-1332-05	NP-ELEC 10UF 25WV		
C213			CF92FV1H104J	MF 0.10UF J		
C214			CE04KW1C220M	ELECTRO 22UF 16WV		
C215			CE04KW1V100M	ELECTRO 10UF 35WV		
C218			CK45FF1H103Z	CERAMIC 0.010UF Z		
C219			CE04KW1V100M	ELECTRO 10UF 35WV		
C235			CK45FF1H223Z	CERAMIC 0.022UF Z		
C302			CE04KW1V4R7M	ELECTRO 4.7UF 35WV		
C303			CE04DW1C471M	ELECTRO 470UF 16WV		
C304			CE04KW1E221M	ELECTRO 220UF 25WV		
C305			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C306			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C307,308			CK45FF1H103Z	CERAMIC 0.010UF Z		
C309			CE04KW1H331M	ELECTRO 330UF 50WV		
C310			CE04KW1E101M	ELECTRO 100UF 25WV		
C312			CE04KW1E102M	ELECTRO 1000UF 25WV		
C315,316			C91-0749-05	CERAMIC 220PF K		
C317			CK45FF1H103Z	CERAMIC 0.010UF Z		
C318,319			C91-0749-05	CERAMIC 220PF K		
C320			CE04KW1V100M	ELECTRO 10UF 35WV		
C321			CE04KW1E101M	ELECTRO 100UF 25WV		
C324			CK45FF1H103Z	CERAMIC 0.010UF Z		
J1	2B		E20-0321-05	LOCK TERMINAL BOARD (ANTENNA)		
J2	2B		E13-0235-05	PHONO JACK (OUTPUT)		
J3	2B		E11-0188-05	MINIATURE PHONE JACK(S.CONTROL		
⚠ J302	2A		E03-0108-05	AC OUTLET	E	
⚠ J303	2A		E03-0109-05	AC OUTLET	T	
CF1 ,2			L72-0536-05	CERAMIC FILTER		
CF4			L72-0096-05	CERAMIC FILTER		
L1			L30-0488-05	AM IFT		
L2			L30-0484-05	FM IFT		
L3			L40-1021-14	SMALL FIXED INDUCTOR(1.0mH,K)		
L4		*	L40-5625-20	SMALL FIXED INDUCTOR(5.6mH,J)		
L4			L40-5625-29	SMALL FIXED INDUCTOR(5.6mH,J)		
L5		*	L40-6825-20	SMALL FIXED INDUCTOR(6.8mH,J)		
L5			L40-6825-29	SMALL FIXED INDUCTOR(6.8mH,J)		
L6 ,7			L79-0790-05	LC FILTER		
L8			L40-1091-17	SMALL FIXED INDUCTOR(1uH)		

E: Scandinavia & Europe	**K**: USA	**P**: Canada
Y: PX(Far East, Hawaii)	**T**: England	**M**: Other Areas
Y: AAFES(Europe)	**X**: Australia	

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
L9			L30-0485-05	FM IFT		
L104			L39-0195-05	COMBINATION COIL		
L105			L39-0192-05	COMBINATION COIL		
L106			L40-1091-17	SMALL FIXED INDUCTOR(1uH)		
L201			L40-1091-17	SMALL FIXED INDUCTOR(1uH)		
⚠ T301	2B	*	L07-0249-05	POWER TRANSFORMER		
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHz)		
X201			L78-0209-05	RESONATOR (4.194MHZ)		
X201			L78-0218-05	RESONATOR (4.194MHz)		
CP201			R90-0832-05	MULTI-COMP 4.7KX3 J 1/6W		
CP202			R90-0487-05	MULTI-COMP 47KX4 J 1/6W		
CP203			R90-0804-05	MULTI-COMP 47KX8 J 1/4W		
CP204			R90-0850-05	MULTIPLE RESISTOR 100KX3		
CP205			R90-0809-05	MULTIPLE RESISTOR 10KX4		
CP206			R90-0855-05	MULTI-COMP 100KX5 J		
R53			RS14KB3D221J	FL-PROOF RS 220 J 2W		
R318			RS14KB3D121J	FL-PROOF RS 120 J 2W		
R319			RS14KB3A820J	FL-PROOF RS 82 J 1W		
R323			RS14KB3A221J	FL-PROOF RS 220 J 1W		
R324			RS14KB3A222J	FL-PROOF RS 2.2K J 1W		
R329			RS14KB3D102J	FL-PROOF RS 1.0K J 2W		
VR1		*	R12-3688-05	TRIMMING POT(47K)FM TUNE LEVEL		
VR2		*	R12-1619-05	TRIMMING POT(4.7K)VCO		
VR3			R12-3686-05	TRIMMING POT(22K)AM TUNE LEVEL		
VR4		*	R12-5652-05	TRIMMING POT(220K)SEPARATION		
S201-217	2B		S40-1064-05	PUSH SWITCH		
S219	2A		S40-1064-05	PUSH SWITCH (POWER)		
D1 ,2			HSS104	DIODE		
D1 ,2			1N4148	DIODE		F
D1 ,2			1SS133	DIODE		
D3			BZX55-C5V1	ZENER DIODE		F
D3			HZS5.1N(B2)	ZENER DIODE		
D3			RD5.1ES(B2)	ZENER DIODE		
D4 -7			HSS104	DIODE		
D4 -7			1N4148	DIODE		F
D4 -7			1SS133	DIODE		
D109-116			HSS104	DIODE		
D109-116			1N4148	DIODE		F
D109-116			1SS133	DIODE		
D201,202			HSS104	DIODE		
D201,202			1N4148	DIODE		F
D201,202			1SS133	DIODE		
D203			BZX55-C3V9	ZENER DIODE		F
D203			HZS3.9N(B2)	ZENER DIODE		
D203			RD3.9ES(B2)	ZENER DIODE		
D204-210			HSS104	DIODE		
D204-210			1N4148	DIODE		F
D204-210			1SS133	DIODE		
D213-218			HSS104	DIODE		
D213-218			1N4148	DIODE		F
D213-218			1SS133	DIODE		
D220			BZX55-C5V1	ZENER DIODE		F
D220			HZS5.1N(B2)	ZENER DIODE		

E: Scandinavia & Europe **K:** USA **P:** Canada **F:** FRANCE MADE
Y: PX(Far East, Hawaii) **T:** England **M:** Other Areas
Y: AAFES(Europe) **X:** Australia

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
D220			RD5.1ES(B2)	ZENER DIODE		
D221			HSS104	DIODE		
D221			1N4148	DIODE		F
D221			1SS133	DIODE		
D223-226			HSS104	DIODE		
D223-226			1N4148	DIODE		F
D223-226			1SS133	DIODE		
D301			BZX55-C3V3	ZENER DIODE		F
D301			HZS3.3N(B2)	ZENER DIODE		
D301			RD3.3ES(B2)	ZENER DIODE		
D302		*	BZX55-C2V7	ZENER DIODE		F
D302			HZS2.7N(B2)	ZENER DIODE		
D302			RD2.7ES(B2)	ZENER DIODE		
D303			BZX55-C13	DIODE		F
D303			HZS13N(B2)	ZENER DIODE		
D303			RD13ES(B2)	ZENER DIODE		
D304,305			HSS104A	DIODE		
D304,305			1SS131	DIODE		
D309,310			S5688B	DIODE		
D309,310			1N4004	DIODE		F
D309,310			1SR139-100	DIODE		
D313-317			HSS104	DIODE		
D313-317			1N4148	DIODE		F
D313-317			1SS133	DIODE		
FL201	2A	*	CF1022C	FLUORESCENT INDICATOR TUBE		
IC1			LA1266	IC(AM/FM IF)		
IC2			AN7470	IC(FM MPX)		
IC3			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
IC201		*	CXP5016-532S	IC(4BIT MICROCONPUTER)		
IC202			BA10393	IC(DUAL COMPALATOR)		
IC203			LB1433N	IC(LEVEL METER DRIVER)		F
IC204			M5223P	IC(OP AMP X2)		
IC205			NJM78L05A	IC(VOLTAGE REGULATOR/ +5V)		
Q1			2SC1923(R,O)	TRANSISTOR		
Q2			2SC1845(F,E)	TRANSISTOR		
Q3 ,4			JC501(P,Q)	TRANSISTOR		F
Q3 ,4			2SC1740S(Q,R)	TRANSISTOR		
Q3 ,4			2SC2458(Y,GR)	TRANSISTOR		
Q5			2SK163(L,M)	FET		
Q5			2SK364(GR,BL)	FET		
Q101			JC501(P,Q)	TRANSISTOR		F
Q101			2SC1740S(Q,R)	TRANSISTOR		
Q101			2SC2458(Y,GR)	TRANSISTOR		
Q102-104			JA101(P,Q)	TRANSISTOR		F
Q102-104			2SA1048(Y,GR)	TRANSISTOR		
Q102-104			2SA933S(Q,R)	TRANSISTOR		
Q105,106			JC501(P,Q)	TRANSISTOR		F
Q105,106			2SC1740S(Q,R)	TRANSISTOR		
Q105,106			2SC2458(Y,GR)	TRANSISTOR		
Q203,204			JC501(P,Q)	TRANSISTOR		F
Q203,204			2SC1740S(Q,R)	TRANSISTOR		
Q203,204			2SC2458(Y,GR)	TRANSISTOR		
Q211-215			DTA124ES	DIGITAL TRANSISTOR		
Q211-215		*	RN2203	TRANSISTOR		
Q211-215			UN4112	TRANSISTOR		F

E: Scandinavia & Europe **K**: USA **P**: Canada
Y: PX(Far East, Hawaii) **T**: England **M**: Other Areas
Y: AAFES(Europe) **X**: Australia

F: FRANCE MADE

⚠ indicates safety critical components.

PARTS LIST

⁎ New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向	Re-marks 備考
Q301,302			2SD1302(S,T)	TRANSISTOR		
Q303			JA101(P,Q)	TRANSISTOR		F
Q303			2SA1048(Y,GR)	TRANSISTOR		
Q303			2SA933S(Q,R)	TRANSISTOR		
Q304			2SC2003(L,K)	TRANSISTOR		
Q305			JC501(P,Q)	TRANSISTOR		F
Q305			2SC1740S(Q,R)	TRANSISTOR		
Q305			2SC2458(Y,GR)	TRANSISTOR		
Q306			2SD1266(Q,P)	TRANSISTOR		
Q307			JA101(P,Q)	TRANSISTOR		F
Q307			2SA1048(Y,GR)	TRANSISTOR		
Q307			2SA933S(Q,R)	TRANSISTOR		
Q308			JC501(P,Q)	TRANSISTOR		F
Q308			2SC1740S(Q,R)	TRANSISTOR		
Q308			2SC2458(Y,GR)	TRANSISTOR		
620	2B		W02-1041-05	FM FRONT-END ASSY		

E: Scandinavia & Europe	**K**: USA	**P**: Canada	**F**: FRANCE MADE
Y: PX(Far East, Hawaii)	**T**: England	**M**: Other Areas	
Y: AAFES(Europe)	**X**: Australia		

⚠ indicates safety critical components.

KT-591/591S/1030L

SPECIFICATIONS

KT-591/591S

FM tuner section

Tuning frequency range	87.5 MHz-108 MHz
Usable sensitivity (MONO)	0.95 μV/10.8 dBf
Total harmonic distortion (at 1 kHz 65 dBf input)	
MONO	0.4%
STEREO	0.5%
Signal to Noise ratio (at 1 kHz, 65 dBf input)	
MONO	78 dB
STEREO	73 dB
Stereo separation	
1 kHz	40 dB
Alternate channel selectivity (±400 kHz)	50 dB
Frequency response (30 Hz-15 kHz)	+0.5 dB, −2 dB
Output level/Impedance (at 1 kHz, 75 kHz dev.)	0.6 V/3.3 kΩ

AM tuner section

Tuning frequency range	
9 kHz step	531 kHz-1,602 kHz
10 kHz step	530 kHz-1,610 kHz
10 kHz step (U.S. and Canada)	530 kHz-1,700 kHz
Usable sensitivity	11 μV/(280 μV/m)
Signal to noise ratio (at 30% mod, 1 mV input)	50 dB
Total harmonic distortion	0.5%
Output level/Impedance (at 30% mod. 1 mV input)	0.18 V/3.3 kΩ

KT-591S only

Tuning frequency range	
9 kHz step	531 kHz-1,602 kHz
10 kHz step	530 kHz-1,610 kHz
Usable sensitivity	17 μV/(560 μV/m)
SW Tuning frequency range	
SW1	3.2 MHz-7.3 MHz
SW2	9.5 MHz-21.85 MHz

General

Power consumption	10 W
AC outlet	
For U.S.A. and Canada	
UNSWITCHED	1 (800W 6.6A max.)
For U.S military	
UNSWITCHED	1 (700W max.)
For other countries	
UNSWITCHED	1 (500W max.)
Dimensions	W: 440 mm (17-5/16″) H: 75 mm (2-15/16″) D: 264 mm (10-1/2″)
Weight (Net)	2.6 kg (5.5 lb)

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

KENWOOD poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

KENWOOD strebt ständige, Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

KT-1030L

FM tuner section

Tuning frequency range	87.5 MHz-108 MHz
Usable sensitivity (DIN at 75)	
MONO	0.7 μV
STEREO	22 μV
Total harmonic distortion (DIN at 1 kHz 65.2 dBf input)	
MONO	0.15%
STEREO	0.4%
Signal to noise ratio (DIN weighted at 1 kHz, 65.2 dBf input)	
MONO	68 dB
STEREO	63 dB
Stereo separation (DIN)	
1 kHz	48 dB
Selectivity	
(DIN ±300 kHz)	64 dB
Frequency response (30 Hz-15 kHz)	+0.5 dB, −2 dB
Output level/Impedance (at 1 kHz, 75 kHz dev.)	0.6 V/3.3 kΩ)

MW tuner section

Tuning frequency range	531 kHz-1,602 kHz
Usable sensitivity	13 μV/(400 μV/m)
Signal to noise ratio (at 30% mod. 1 mV input)	50 dB
Total harmonic distortion	0.5%

LW Tuner Section

Tuning frequency range	153 kHz-281 kHz
Usable sensitivity	22 μV
Signal to noise ratio (at 30% mod. 1 mV input)	47 dB
Total harmonic distortion	0.6%
Output level/Impedance (at 30% mod. 1 mV input)	0.18 V/3.3 kΩ

General

Power consumption	10 W
AC outlet	
UNSWITCHED	1 (400W max.)
Dimensions	W: 440 mm H: 80 mm D: 264 mm
Weight (Net)	2.6 kg

KENWOOD CORPORATION
Shionogi Shibuya Building, 17-5, 2-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

KENWOOD U.S.A. CORPORATION
2201 East Dominguez Street, Long Beach, CA 90810;
550 Clark Drive, Mount Olive, NJ 07828, U.S.A.

KENWOOD ELECTRONICS CANADA INC.
P.O. BOX 1075, 959 Gana Court, Mississauga, Ontario, Canada L4T 4C2

TRIO-KENWOOD U.K. LTD.
KENWOOD House, Dwight Road, Watford, Herts., Wd1 8eb United Kingdom

KENWOOD ELECTRONICS BENELUX N.V.
Mechelsesteenweg 418 B-1930 Zaventem, Belgium

KENWOOD ELECTRONICS DEUTSCHLAND GMBH
Rembrücker-Str. 15, 6056 Heusenstamm, Germany

TRIO-KENWOOD FRANCE S.A.
13 Boulevard Ney, 75018 Paris, France

KENWOOD LINEAR S.p.A.
20125, MILANO-VIA ARBE, 50, ITALY

KENWOOD ELECTRONICS AUSTRALIA PTY, LTD.
P.O. BOX 504, 8 Figtree Drive, Australia Centre, Homebush N.S.W. 2140, Australia

KENWOOD & LEE ELECTRONICS, LTD.
Wang Kee Building, 4th Floor, 34-37, Connaught Road, Central, Hong Kong